DOCUMENT RESUME

ED 313 771 EA 021 403

TITLE	Educational Reforms. Bulletin of the UNESCO Principal Regional Office for Asia and the Pacific, Number 29.
INSTITUTION	United Nations Educational, Scientific, and Cultural Organization, Bangkok (Thailand). Regional Office for Education in Asia and the Pacific.
PUB DATE	Dec 88
NOTE	164p.
AVAILABLE FROM	Publications, UNESCO Principal Regional Office for Asia and the Pacific, P.O. Box 967, Parkanong Post Office, Bangkok 10110, Thailand ($12.00).
PUB TYPE	Books (010) -- Reports - Evaluative/Feasibility (142)
EDRS PRICE	MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	Change Strategies; *Educational Change; *Educational Policy; *Elementary Secondary Education; Foreign Countries; Higher Education; Teacher Education; Vocational Education
IDENTIFIERS	*Asia Pacific Region; *Educational Restructuring

ABSTRACT

Over the past four decades, countries in the Asia Pacific region have made in-depth reviews of educational policies that have led to reforms. The volume's first section gives an overview of experiences of countries in the region with respect to education policy review exercises and the formulation and implementation of educational policies and reforms. The second section is an account of the highlights of the comprehensive educational reforms in Bangladesh, China, India, Japan, and the Republic of Korea. The third section presents seven essays on special areas and issues in educational reform: (1) distance education in Thailand; (2) development and reform in teacher education; (3) reform in secondary education in Pakistan; (4) recent reforms in technical and vocational education; (5) education of the disadvantaged--problems and issues; (6) Asia-Pacific Programme of Education for All--a reform in mass education in Asia and the Pacific; and (7) higher education reform in India, Japan, and China. Section 4 is a bibliographical supplement containing 92 references, a list of previous issues, and recent publications. (SI)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED313771

EA 021 403

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☒ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY
E. Djaka
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

29

"Educational reforms in Asia", *Bulletin of the Unesco Principal Regional Office for Asia and the Pacific* (29): 1-141, December 1988.

Bibliography: p. i-xiii.

1. EDUCATIONAL REFORM – ASIA/PACIFIC.
2. EDUCATIONAL POLICY – ASIA/PACIFIC.
3. EDUCATIONAL DEVELOPMENT – ASIA/PACIFIC.
4. EDUCATIONAL PLANNING – ASIA/PACIFIC.
I. Unesco. Principal Regional Office for Asia and the Pacific.

379.15
379.5 ○

EDUCATIONAL reforms

EDITORIAL BOARD FOR THIS ISSUE

M. Makagiansar
J. Beynon
L. de la Cruz
M. Selim
T.M. Sakya
M. Qureshi
A. Ali Khan
M. Tun Lwin
P.K. Kasaju
E. Djaka

BULLETIN

OF THE UNESCO PRINCIPAL REGIONAL OFFICE FOR ASIA AND THE PACIFIC

EDUCATIONAL reforms

NUMBER 29 • DECEMBER 1988

© UNESCO 1989

Published by the
Unesco Principal Regional Office for Asia and the Pacific
P.O. Box 967, Prakanong Post Office
Bangkok 10110, Thailand

Printed in Thailand

The designations employed and the presentation of material throughout the publication do not imply the expression of any opinion whatsoever on the part of Unesco concerning the legal status of any country, territory, city or area or its authorities, or concerning its frontiers of boundaries. Opinions printed here do not necessarily represent the official views of Unesco. Opinions expressed in signed articles are those of the authors.

Articles appearing herein may be freely reproduced. Please credit this issue of the Bulletin, and send three voucher copies containing any reproduction to the Assistant Director-General UNESCO/PROAP, Unesco Principal Regional Office for Asia and the Pacific, address above. Reprints of signed material must bear the author's name.

BKR/89/M/319-3400

C O N T E N T S

Section One : **Educational policies leading to reform in Asia and the Pacific: An overview** . 1

Section Two : **Highlights of comprehensive educational reforms** . . . 19

Educational reform in Bangladesh . . 19
Educational reform in China . . . 23
Educational reform in India . . . 28
Educational reform in Japan . . . 35
Educational reform in Korea . . . 46

Section Three : **Special areas and issues in educational reforms** 51

Distance education in Thailand . . . 51
Development and reform in teacher education . 65
Reform in secondary education in Pakistan . 76
Recent reforms in technical and vocational education 99
Education of the disadvantaged: problems and issues 103
Asia-Pacific Programme of Education for All: A reform in mass education in Asia and the Pacific 122
Higher education reform in India, Japan and China 129

Section Four : **Bibliographical supplement** . i – viii

About the Bulletin . . . . ix – x

Recent publications . . . . xi – xiii

SECTION ONE

OVERVIEW

Bulletin of the Unesco Principal
Regional Office for Asia and the Pacific
Number 29, 1988

EDUCATIONAL POLICIES LEADING TO REFORM IN ASIA AND THE PACIFIC: AN OVERVIEW

On different occasions over the past four decades, countries in the Asia-Pacific region have made in-depth reviews of those educational policies that have led to reforms. More recently, a number of them have conducted their reviews in light of on-going socio-economic transformations and scientific and technological developments. In the special issue of the ***Bulletin of the Unesco Regional Office for Education in Asia and the Pacific***, which commemorates the fortieth anniversary of the founding of Unesco, eminent scholars from countries in the Asia-Pacific region presented important contributions, documenting the unique experiences of individual countries with regard to policy reviews and reform initiatives in education.[1] Since the publication of the Bulletin's commemorative issue, some countries have begun new reform initiatives and others have started moving through the different phases of implementation for reforms that were already underway.

This chapter gives an overview of country experiences in the region with respect to education policy review exercises and the formulation and implementation of educational policies and reforms. It highlights the emerging trends and efforts in educational policies and reforms as well as the major problems and issues in their implementation. The heterogeneity of the Asia-Pacific region nations in terms of geographic location, population size, socio-political systems, stage and pattern of economic development, technological advancement and level of educational development means that there can be no singular regional scenario for the area's wide-ranging and complex problems, issues and approaches. This paper endeavours to highlight some of the common problems, issues and priorities that are associated with educational policy reviews, reform initiatives and reform

---

1. "Unesco in Asia and the Pacific: 40 years on", ***Bulletin of the Unesco Regional Office for Education in Asia and the Pacific***, Number 27, November 1986. 1 vol.

implementation, with a view to facilitating inter-country exchanges of experiences in these areas.

Mechanisms for Educational Policy Reviews and Reform Initiatives

Country experiences have shown that the derivation of the proper authority to undertake an in-depth review of educational policies is a very important step towards the initiation of educational reforms. The goals of education are societal goals that extend beyond the sectoral boundary of education. Thus, ideas for reform may originate not only from within the education sector, but also from other external sectors. More often than not, such ideas come from areas outside of education or from the society at large. The official bodies entrusted with the task of conducting policy reviews are, therefore, usually widely represented and include eminent personalities from different walks of life. Such bodies are established by the highest levels of state power and their terms of reference are broad and comprehensive.

Japan

For example, in Japan, a Provisional Council on Educational Reform was constituted by law. On 5 September 1984, the Prime Minister, Mr. Yasuhiro Nakasone, asked the Provincial Council to advise him on "basic strategies for necessary reforms with regard to governmental policies and measures in various aspects, so as to secure such education as will be compatible with the social changes and cultural developments of our country.[2] Council membership comprises representatives from academic institutions, industry, business and trade unions. In addition, there are specialist members with specific expertise in various fields.

Republic of Korea

Similarly, in the Republic of Korea, in accordance with the ***Regulation of the Presidential Commission for Education Reform*** (Presidential Decree 11, 657, 7 March 1985), the Presidential Commission for Education Reform was established "to serve as the consultative body to the President regarding policy prescriptions for educational reforms".[3] The membership of the Commission comprises academicians, educationalists and representatives of other social and economic sectors.

---

[2] Japan. Provisional Council on Educational Reform. ***First report on educational reform.*** Tokyo, 1985.

India

In India in the four decades since the country's independence, there have been two comprehensive proposals for educational reform, the Sargeant Report and Plan (1944) and the Kothari Commission Report and Plan (1966), and two sectoral reform proposals, the Radhakrishnan Commission Report and Plan for University Education (1948) and the A.L. Mudaliar Commission Report and Plan for Secondary Education (1953).[4] In a recent comprehensive review of educational policies in India, instead of appointing a commission to prepare and submit a report, the methodology of the education reform movement was changed drastically. A document entitled ***Challenge of education – a policy perspective*** was prepared and issued by the Government of India in August 1986. The document contained "an overview of the state of education and pointers to the direction of future initiatives, based essentially on views and suggestions from educational planners, teachers, students, parents, intellectuals and citizens interested in education". Its aim was "to provide the basis for a nationwide debate, which would facilitate the formulation of new education policy".[5]

China

The Decision of the Central Committee of the Chinese Communist Party (CPC) in May 1985 concerning the reform of China's educational structure originated in the highest organ of state power and has profound implications. Mr. Wu Wei stressed that, "the Decision, which is an important document in itself, should be seen as integrated, in one way or another, with two other decisions made by the CPC Central Committee, namely, the ***Decision on reform of***

---

[3] Korea, Republic of. The Presidential Commission for Education Reform. ***Strategies for educational reform.*** Seoul, 1986.

[4] Adiseshiah, Malcolm S. "Education reform perspectives in India", ***Bulletin of the Unesco Regional Office for Education in Asia and the Pacific,*** Number 27, November 1986.

[5] India. Ministry of Education. ***Challenge of education – a policy perspective.*** New Delhi, 1985.

China's economic structure and the *Decision on reform of China's scientific and technological structure".*[6] The fundamental aim of educational reform in China is to enhance the nation and produce as many qualified people as possible.

In his report on the Seventh Five-Year Plan, delivered at the Fourth Session of the Third National People's Congress (NPC) convened in 1985, Premier Zhao Ziyang said:

"Schools of all types at different levels are required to carry out the policy of all-round development – moral, intellectual, physical and aesthetic, and to rationally strengthen labour education in light of their own characteristics. They should persistently give top priority to the improvement of educational quality and the preparation of qualified people".

Bangladesh

The Bangladesh National Education Commission was established in May 1987 to prepare a national policy document on education with a long-term perspective. As specified in its terms of reference, the Commission "would critically analyze the existing educational situation and make specific recommendations for creating a solid foundation of education in light of the fundamental principles of the state, cultural heritage of the country, needs of economic development, and social demands of education such as primary, secondary and higher including agricultural, technical and medical. The Commission would also make specific recommendations to strengthen the management of the education system so as to make it timely, productive and free of wastage with a view to developing appropriate human resources for the country and creating worthy citizens imbued with national pride".

The Process of Formulation of Educational Policies and Initiation of Reforms

Recent policy reviews and reform initiatives in the region have featured a participatory approach, that is, a process whereby all interested parties are given ample opportunity to participate in policy formulation. India's experience in the formulation of the National policy on education 1986 offers a unique experience in this regard.[7]

---

[6] Wu, Wei. "Educational reform drive for promotion of the fundamental undertaking of the nation", ***Bulletin of the Unesco Regional Office for Education in Asia and the Pacific,*** Number 27, November 1986.

The Challenge of education document was first discussed with the Education Ministers of the State Governments of India on 29–30 August 1985. Thereafter, it was released to the public at large, with 580,000 copies issued in English and another half a million copies circulated in all the regional languages. The discussion of the document began with debates in both houses of the Parliament followed by 11 national seminars and 17 seminars sponsored by the union government and its agencies. In addition, conferences and workshops for legislators, local authorities, teachers, trade union leaders and students/representatives were also organized. The State Governments were persuaded to assume the responsibility for carrying the debate right down to the grass-roots level. The Challenge document was discussed in practically every educational institution between educational managers, teachers and parents.

Similarly, in China the ***Decision on the reform of China's educational structure*** greatly helped to increase the awareness of the importance of education among local party organizations and government departments at every level.

Emerging Trends and Thrusts in Educational Policies and Reforms

Apart from placing their primary emphasis on the unfinished tasks of eradicating illiteracy and the universalization of primary education, the educational policies and reforms initiated by the countries of the region are likely to address themselves to broader issues such as human resources development, scientific and technological development, modernization, culture and values, environment, information technology and internationalization.

Bangladesh

In Bangladesh, several attempts were made to restructure education at various levels. Unfortunately, most of them failed to bring about the desired results, leaving unsolved the problems of access, relevance, quality, resources and management. The Bangladesh government recognizes that the future will bring new demands and stresses together with unlimited opportunities. To prepare the people to cope with the changes and adjust to new environments, the present thrust is clearly on a strategy for human resources development with a longer-term perspective.

---

[7] Sarup, Anand. "A retrospective view of formulating a new education policy", ***Bulletin of the Unesco Regional Office for Education in Asia and the Pacific,*** Number 27, November 1986.

With the Second Five-Year Plan (1980–1985), government policy has been to widen the base of primary education, improve educational quality, consolidate vocational/technical education and marginally expand university education with emphasis on science and technology. The government has also initiated a number of administrative reforms and innovations to improve sectoral performance. It is felt, however, that basic and structural reforms are still needed to make the education and training sector an effective tool for human resource development and to improve the country's prospects for economic growth and the alleviation of poverty.

The universalization of primary education (UPE) and the eradication of illiteracy are two of the basic goals of the Bangladesh government's Perspective Development Plan from 1980 to 2000. These priorities were established with the proposition that "investments in human capital development, particularly in primary education and literacy, can make a significant contribution to agricultural output, labour productivity, reduced fertility rates, and improved health conditions".[8]

China

In China, one of the priorities in the educational policies and reforms initiated in recent years has been the promotion of nine-year compulsory education. According to the decision made by the CPC in May 1985, entitled Reform of China's Educational Structure, it is "entirely necessary and feasible to introduce nine-year compulsory education, place it at the top of our agenda as a matter of vital importance for the improvement of the quality of the nation and for the prosperity of the country, and call on the entire party and people of all our nationalities to go all out to put it into effect step-by-step."[9]

---

[8] Bangladesh. Ministry of Education. *Third Five-Year Plan (1985–90): Education Sector document*. Dhaka, 1985.

Philippines

The Medium-Term Philippine Development Plan (1987-1992) was approved and adopted in November 1986. The development efforts under the plan are principally directed towards the goals of alleviating poverty, generating productive employment, promoting equity and social justice, and attaining sustainable economic growth.

Within the plan period, the plan states that the education and manpower development sector will address the following objectives:

a) Improve quality and increase the relevance of education and training;

b) Increase access of disadvantaged groups to all educational areas;

c) Accelerate the development of middle- and high-level manpower toward economic recovery and sustainable growth, and enhance their employability, productivity and self-reliance;

d) Inculcate values needed in social transformation;

e) Preserve, enrich and propagate the nation's desirable cultural heritage and legacy;

f) Raise the level of awareness, interest and participation in sports and cultural activities;

g) Maintain an educational system that is truly Filipino in orientation, yet open to constructive ideas from everywhere, but is alert to influences inimical to national dignity.

The major thrusts of the policies and strategies under the plan include:

a) Improvement of the quality and relevance of education and training with respect to Philippine conditions and needs;

b) Equitable access to education and training opportunities;

c) Intensification of values education;

---

9. China, People's Republic. ***Reform of China's educational structural***; decision of the CPC Central Committee: May 1985. Beijing, Foreign Languages Press, 1985.

4. Promotion of entrepreneurial education and training;
5. Increased emphasis on science education, indigenous research and experimentation;
6. Mobilization and utilization of education personnel with an increasingly commensurate system of compensation and incentives;
7. Equitable allocation, efficient management and effective utilization of financial resources;
8. Institutionalization of functional linkages and collaboration between formal and non-formal education and training institutions;
9. Strengthening the system of educational and manpower development planning, implementation, monitoring and evaluation;
10. Maximizing Philippine involvement in the international mainstream of education and manpower development.

Japan

The National Council on Educational Reform in Japan addressed itself to a number of issues within the context of the socio-economic and educational development of the country. The Council has published four reports and a set of recommendations.[10] In its first report, the Council identified eight major issues to be considered: basic requirement for an education relevant to the twenty-first century; organization and systematization of life-long learning and correction of the adverse effects of undue emphasis on the educational background of individuals; enhancement of higher education and individualization of higher education institutions; enrichment and diversification of elementary and secondary education; improvement of the quality of teachers; coping with internationalization; coping with the information age; review of educational administration and finance.

In its second report, the Council outlined basic educational ideals for the next century:

---

[10] Japan. National Institute for Educational Research. Office of the Overall Planning and Co-operation. ***The recommendations of the National Council on Educational Reform: a summary.*** Tokyo, 1988.

a) The nurturing of open and generous hearts and minds, strong bodies and richly creative spirits;

b) The development of free and self-determining spirits and public-minded characters;

c) The cultivation of Japanese who are competent to live as members of the world community.

The second and third reports made specific recommendations for basic educational reform strategies in the areas identified by the Council in its first report. In its fourth and final report, the Council presented a synthesis of the preceding three reports. It also presented a number of recommendations with regard to public administration in education, science and culture and the issue of beginning Japan's school year in the autumn.

Malaysia

In Malaysia, the proclamation of the Rukunegara (National Ideology) and the New Economic Policy in 1970 was an important milestone in the history of educational development in the country. The central aims underlying the Rukunegara are to achieve:

a) A united nation with a plural society;

b) A democratic society through a constitutionally elected Parliament;

c) A just society with equal opportunities for all;

d) A liberal society of diverse cultural traditions;

e) A progressive society oriented towards science and modern technology.[11]

The New Economic Policy is an important strategy for achieving the desired goals of Rukunegara. It seeks to eradicate poverty among all Malaysians and to restructure the Malaysian society so that the identification of race with economic function and geographical location is reduced and eventually eliminated.

The National Education Policy and the New Economic Policy are strategies in Malaysia's quest for a national identity, national unity and rapid national development. These efforts involve the whole range of social, economic, political and educational activities. Education is viewed as a vehicle for transforming a heterogenous, traditional, pluralistic society into one that is united, democratic, just, progressive and liberal. Thus, education becomes functional, innovative and reconstructive, with the whole system geared towards nation-building. It is an integral component of the overall national developmental effort.

---

[11] Malaysia. Ministry of Education. Educational Planning and Research Division. ***Education in Malaysia.*** Kuala Lumpur, 1985.

The concept of national identity and unity and the other underlying principles of Rukunegara find expression in the stated goals, aims and objectives of the education system and all its programmes. They are the guiding principles for curriculum development, which emphasizes the intellectual and social skills appropriate to the age and maturation of the individual in accordance with national needs. needs.

The goals of education in Malaysia may be considered to be the ideals that provide the necessary perspective for all endeavours in education and its development. The goals of education are concerned with the overall development of the individual and may be summarized as follows for the different areas:

a) As an individual, to nurture balanced development in each individual by providing for the growth of physical, intellectual, emotional, moral and aesthetic potentials as a Malaysian upholding the tenents of Rukunegara;

b) In special aspects, to assist the individual in obtaining greater insights and understanding into Malaysia's ecological and cultural heritage, social institutions, values and practices, societal pressures and challenges, and to enable the individual to function and fulfill his commitments and responsibilities as a citizen;

c) In economic aspects, to develop the human resources of the nation by helping the individual become a skilled, competent, rational and responsible planner, producer and consumer.

Pakistan

The Seventh Plan strategy in Pakistan is expected to increase the literacy rate through the improvement and expansion of primary education, and to motivate the private sector to play an active role.[12] While it is estimated that the literacy rate will rise to about 40 per cent by 1992 or 1993, the infrastructure created during the Seventh Plan is expected to yield a literacy rate of 80 per cent by the end of the century.

The objectives of the Seventh Plan in the education and training sector are as follows:

a) Broaden the resource base for education;
b) Universalize access to primary education;
c) Substantially improve technical and vocational training facilities;
d) Improve the quality of education at all levels and particularly university education.

The Seventh Plan strategy emphasizes the provision of at least basic primary education to every boy and girl in the country. By 1992 or 1993, almost every child age 5 years and older will have access to a primary or mosque school. Special attention will be paid to increasing the participation rate of girls. Under the Seventh Plan, the separate entity of the preparatory class (kachi/nursery) will be recognized. There will be legislation for compulsory primary education up to class V for all localities where a school is available within a radius of 1.5 kilometres. A strong motivational campaign will be launched to convince parents to send their children to school.

The plan aims at improving the physical as well as the human resource infrastructure by providing buildings for shelter-less schools and by adding classrooms to overcrowded schools. It will ensure that new educational facilities are geographically well-spread, so that a school is accessible to every child. Existing disparities between boys' and girls' primary educational facilities will be reduced.

The Seventh Plan will further expand secondary education facilities to absorb the increased output from primary schools. The curriculum at the secondary level will be changed, so that students leaving the system after classes VIII or X possess useful skills, which will enable them to earn a living. In classes VI, VII and VIII, students may be required to select one skill-oriented subject such as agriculture, home economics, metal working, electricity, woodworking or furniture-making. This will give a class VIII graduate an employable skill or allow the graduate to enroll in a vocational school for further training.

---

[12] Pakistan. Planning Commission. ***Seventh Five-Year Plan 1988-93, and Perspective Plan 1988-2003.*** Islamabad, 1988. p. 245.

Incentives will be provided to attract good science and mathematics teachers. The quality of English language classes will be improved by strengthening the teacher training programme and by revising courses in the English language.

It has been proposed that the Seventh Plan reorient the educational structure as follows:

a) Classes 0, I, II, III: lower secondary;
b) Classes IV, V, VI, VII, VIII: upper secondary;
c) Classes IX, X, XI, XII: secondary;
d) Classes XIII, XIV, XV: college;
e) Classes XVI, XVII and above: university.

The establishment of an intermediate college is not considered to be viable economically because the facilities would remain underutilized. In the Seventh Plan period no intermediate college will be opened, instead classes VI and VII will be added to selected high schools wherever justified. Similarly, all intermediate colleges will gradually start to offer classes IX and X as well. The promotion of other interests of the school and staff will also be protected under the plan.

The Seventh Plan will take necessary measures to reverse present trends and increase the share of enrolment in technical and professional education. For this purpose, the public sector will set up 36 poly- and mono-technical colleges, four commercial colleges and 50 vocational training centres. Moreover, the private sector will be encouraged to set up technical and vocational institutions.

During the Seventh Plan period, a council on technical education will be constituted to ensure co-ordination among the different agencies responsible for technical, vocational and commercial education.

During the period, teacher efficiency will be improved by: gradually raising the minimum qualifications for new entrants; revitalizing teacher training programmes through structural and curricular changes and the improved management of teacher training institutions; providing better career prospects for teachers and

21

continuous in-service education, weeding out inefficient personnel and providing various incentives for good performance.

Thailand

During the past few decades, Thailand has achieved considerable success in quantitatively expanding primary, secondary and higher education. Despite this progress in educational development, critical problems and issues remained to be addressed. It has also become necessary to reconsider the status of the National Education Scheme of 1977.

When a new government was formed after the national election in August 1988, the Office of the National Education Commission prepared a report for the government's consideration, which included a policy proposal on educational development. Several major policy thrusts were also reflected in a document entitled ***Directions for future educational development in Thailand***, which was condensed from the report submitted to the government. Both papers suggested that the formulation of policies for educational development should comprise the following issues:

a) Acceleration of action to eradicate illiteracy;

b) Intensification of basic education for all citizens to be expanded to at least the lower secondary level to ensure the fruitful function of individuals in the society;

c) Increase in the effectiveness of science education instruction by encouraging and supporting educational institutions at all levels to utilize scientific knowledge in developing appropriate technology for the country's use;

d) Improvement of the role of higher education institutions to intensify the production of manpower for science and technology fields and thus enhance national development in the future;

e) Offering various educational formats to the rural population to help improve standards of living and individual well-being and to develop and conserve the resources and environment, which are essential for the rural communities;

f) Expansion of appropriate educational services to the educationally disadvantaged, especially to primary or early school-leavers, the disabled and those with cultural differences;

g) Improvement of the content and learning processes in formal and non-formal education systems with the goal of preparing learners to be competent in their vocations and able to create jobs for self-employment or independent occupation;

h) Promotion of instructional activities that will instill in students the desirable qualities needed for national development, i.e., devotion to work, diligence, responsibility, discipline and punctuality;

i) Reinforcement and introduction of relevant educational activities to implant values education and ethics into children, youth and the public at large by emphasizing practicality and the co-operation of families and religious institutions;

j) Motivating children, youth and the general public to develop their learning skills or habits so that they will continue to search for new knowledge as well as enjoy reading and studying;

k) Encouragement of higher education institutions, both public and private, by giving them the academic freedom to implement activities that will reinforce the development of the country and produce graduates of high quality who are able, based on their own resources and the concept of self-reliance, to create jobs, be self-employed or become managers of business;

l) Give encouragement to the private sector to take a more active role in educational provision;

m) Localization of educational administration, planning and curriculum development at the provincial and educational institution levels as an integral part in the development process;

n) Increase the awareness of the mass media, namely, newspapers, radio and television regarding their role as transmitters of meaningful information to the general public, especially in connection with child-rearing for different target groups, for example, mothers, baby-sitters and the elderly.

The Cabinet approved this policy document at its meeting on 20 September 1988 and stressed the importance of the following issues:

a) Literacy for all;

b) Expansion of basic education from the current six years to at least nine years;

c) Increasing the effectiveness of teaching in science, mathematics, foreign languages and physical education subjects;

d) Encouragement of higher education institutions to produce the manpower needed for future national development and the promotion of research work that is geared towards rural development;

e) Revision of the content and instructional processes for the formal and non-formal educational systems;

f) Increased participation of the private sector in educational provision.

Strategies and Action Plans for the Implementation of Educational Policies and Reforms

While there may be some differences in modalities and approaches, the Asian and Pacific countries have clearly placed special emphasis on strategies and action plans for the implementation of educational reforms. Experience has shown that without such emphasis, the intended outcomes of new educational policies and reform initiatives will not be realized. One interesting strategy is that of India.

The Indian Parliament during the Budget Session in 1986 discussed and adopted the **National Policy on Education 1986**. A promise was made at that time by the Minister of Human Resources Development that he would present a programme of action for the implementation of the policy at the Monsoon Session. Immediately after the Budget Session, the Ministry undertook an intensive exercise to prepare the proposed programme of action.

Initially, 23 task forces were constituted and each was assigned a specific subject covered by the National Policy on Education. Eminent educators, experts and senior representatives of the central and state governments were associated with these task forces. The subjects assigned were:

a) Making the system work;
b) Content and processes of school education;
c) Education for women's equality;
d) Education of the scheduled castes, scheduled tribes, and other backward sections;
e) Minority education;
f) Education of the handicapped;
g) Adult and continuing education;
h) Early childhood care and education;
i) Elementary education (including non-formal education and 'Operation Blackboard');
j) Secondary education and Yavodaya Vidyalayas;
k) Vocationalization;
l) Higher education;
m) Open university and distance learning;
n) Technical and management education;
o) Research and development;
p) Media and educational technology (including the use of computers in education);
q) De-linking degrees from jobs and manpower planning;
r) The cultural perspective and implementation of language policy;
s) Sports, physical education and youth;
t) Evaluation process and examination reform;
u) Teachers and their training;
v) Management of education;
w) Rural universities/institutes.

To strengthen party and government leadership over education, a State Commission of Education was established to monitor the implementation of the major principles and policies concerning education, make overall arrangements for the development of educational undertakings, co-ordinate the educational work of various departments, and provide general plans and guidance for educational reform. While the system of administration was being streamlined and power was devolved onto subordinate units, legislation regarding education was stepped up. Local authorities were given more power and entrusted with greater responsibility for the development of and entrusted with greater responsibility for the development of education. Party committees and governments at all levels were urged to give strategic priority to education and make its development one of their chief tasks. The success of this development was to be an essential factor in their appraisal of their subordinates' performance.

Concluding Remarks

Historical experience and current initiatives have shown that policymakers and planners in the region have made persistent, conscious efforts to gear their educational systems to meet changing socio-economic, technological and cultural conditions. Systematic attempts have been made in some countries to improve the methodology of policy formulation and the initiation of reforms by promoting wider public interest and encouraging multi-sectoral participation in the entire process, in addition to enlisting professional contributions from educationists and educators.

In the recent reform initiatives, unprecedented attention has been directed at implementation strategies and measures with a view to ensuring that the objectives of the reforms are achieved. Such strategies and measures include the increased allocation of resources, infrastructural development, institutional realignment, content and curriculum renewal, pedagogical innovations including the application of modern communications technology, and the mobilization, upgrading and better utilization of available manpower.

As the countries accumulate more experiences in the process of educational policy implementation and reform, the next phase of research could focus appropriately on aspects relating to implementation, monitoring and evaluation. Clearly, the desired effectiveness and efficiency of the educational policies and reforms will be fully achieved through the systematic application of monitoring and evaluation methodologies and the initiation of mid-course corrective actions, whenever necessary.

SECTION TWO

EDUCATIONAL REFORMS IN SELECTED COUNTRIES

Bulletin of the Unesco Principal
Regional Office for Asia and the Pacific
Number 29, 1988

HIGHLIGHTS OF COMPREHENSIVE EDUCATIONAL REFORMS

While many countries have introduced new educational policies and innovative measures for their implementation, the initiatives taken by a few have been so comprehensive in scope and wide-ranging in action that they led to significant reforms in the nations' education systems. The following is an account of the highlights of the comprehensive educational reforms in Bangladesh, China, India, Japan and Republic of Korea.

Bangladesh

Organization

As in many Asian countries, the Ministry of Education in Bangladesh is the agency that initiates educational reform. However, the Policy Paper on Education issued by the Ministry of Education in 1988 gave no details about a specific educational reform body or structure within the Ministry.

Problems that called for educational reform

One of the most serious problems of education in Bangladesh was its poor quality and lack of relevance at all levels. Assessments of the current educational management system, teacher training, supervision and performance found these areas to be inefficient and teacher support materials and equipment inadequate. School buildings and other facilities are often lacking or in a bad state of repair. Information which to base policy, plans and expenditures is limited and the management capability of the system to implement the government's educational programmes is weak. Moreover, the output of the system is becoming increasingly ill-suited to the needs of the economy and unable to keep up with technical and scientific developments. More details of the problems and issues at each level of education are identified in the sections below.

Primary Education. The problems and weakness in primary education include:

1. Low enrolment figures, high drop-out rates and frequent repetition of grades;
2. Inadequate physical facilities and unattractive academic environments;
3. Low teacher motivation and poor performance;
4. Frequent teacher absenteeism;
5. Under-achievement of a large majority of children;
6. Inappropriate methods of evaluation for student performance;
7. Inadequate supervision and management;
8. Lack of community participation.

Secondary Education. The present curricula at the secondary and higher secondary levels are mostly theoretical and include subjects that lag far behind the social, economic and technological developments, which have taken place in the world. Other weaknesses included:

1. Poor quality teaching due to insufficient numbers of qualified teachers;
2. Large failure rates in public examinations;
3. Lack of adequate physical and learning facilities;
4. Wide disparities in teacher and physical facilities between rural and urban schools;
5. The curriculum lacks vocational skills education;
6. Weak management and supervision at the central and operational levels.

Higher Education. The three categories of higher education in Bangladesh comprise college education, technical education, and university education.

The major problem in college education is the unplanned growth of colleges without sufficient basic facilities and adequate teaching staffs, which has resulted in a large number of failures in the terminal examinations. These colleges offer mostly liberal arts courses, for which there is little demand in the employment market.

The problems and deficiencies of technical education are:

1. Under-utilization of existing training facilities;
2. Curricula that have not been adjusted to the socio-economic needs and conditions of the country;
3. Poor linkage with the industries;
4. Mismatches between the outflows from the various levels of technical education and demand in the labour market.

In the last category, university education is grappling with many serious problems, which are endemic in nature. The major problems and issues are:

1. Phenomenal population growth with an uneven geographical distribution that has created an urban-rural gap;
2. Unplanned expansion that has no relation to market demand;
3. Lack of participation by the people and potential employers in the area of higher education;
4. Absence of proper guidance and counselling services for students;
5. Under-utilization of existing facilities;
6. Lack of involvement on the part of universities in non-formal community, extension or extra-mural education;
7. Deteriorating academic management;
8. Campus politics and student unrest resulting in frequent university closures.

Educational reform strategies and measures

After a close study of the Policy Paper on Education, 1988 published by the Ministry of Education, the educational reform strategies and measures appear to involve mainly administrative structural reorganization. The paper indicates that since the Second Five-Year Plan, government policy has been oriented to widening the base of primary education, improving the quality of science education at the secondary level, improving the quality and consolidating vocational/technical education and marginally expanding university education with an emphasis on science and technology.

Several specific strategies and measures have been mentioned to carryout the policy:

1. A minimum learning package should be introduced in the primary school curriculum so that at the end of grade V every child is equipped with a set of cognitive and effective skills;
2. For efficiency and quality, primary teachers should not be recruited locally but should be hired at district or divisional levels through a system that has been established by the government;
3. The current government mass education programme to provide adult literacy and non-formal education should be strengthened and should involve all nation-building agencies and should mobilize community resources.
4. The existing gap between urban and rural secondary schools with respect to teaching and physical facilities should be reduced through co-operative efforts by the local community and government;
5. Institutional linkages should be established between vocational/technical institutes and industries;
6. Higher education should be organized as much as possible according to the high-priority, manpower requirements of the country.
7. The existing system of university administration should be re-examined with a view to establishing greater efficiency and accountability;
8. An open university based on distance teaching/learning techniques should be established;
9. Government subsidies should be related to the performance of educational institutions, which should be reviewed every two years;
10. Teacher education is a continuous process and its pre-service and in-service components are inseparable. The system of teacher education should be overhauled;

11. The existing training institutes under the Ministry of Education should be restructured to create greater efficiency, relevance and effectiveness;
12. The management of the education system should be strengthened through restructuring and by appointing appropriately qualified personnel to fill senior management positions;
13. There should be separate directorates for secondary and higher education, respectively;
14. The Directorate of Inspection and Adult should be restructured to make it responsible for the administrative and academic support of educational institutions;
15. An appropriately designed, computer-based, management information system should be established in the Ministry of Education to improve the existing personnel management, budgeting and planning systems.

China

Educational policies in China have evolved over the past decade in light of the new developmental strategies adopted by the Chinese government. Education, as a basis for national modernization, has been given greater importance such that the nation's leaders have repeatedly pointed out that to realize the nation's modernization goals, science and technology are the keys and education is the basis.[1]

Since the early 1980's, through readjustments and reforms, a proportional relationship between educational development and national development has been maintained and the proportional relationship between different levels and types of education within the field of education has been ensured. China has increased its investment in education even while the nation was carrying out overall adjustments in its economy and when temporary financial difficulties existed.

After several years of readjustment, a series of new developments took place from 1984 to 1986. Reforms in education progressed steadily and work on educational legislation was strengthened. To meet the demands of the country's modernization drive and the reforms in its economic system, the reform in the educational system, became a key priority of the government agenda at all levels. In May 1985, "The Communist Party of China Central Committee Resolution on the Reform in Educational System, was approved.[2] The resolution provides a general guiding principle and new perspectives for the reform and development of China's education system and stipulates a series of major policies, which include shifting the responsibility for developing elementary education to local governments. It systematically introduces nine-year compulsory education; readjusts the structure of secondary education; reforms relevant labour and personnel systems; strongly emphasizes the development of vocational and technical education; reforms the enrolment planning and graduate job assignment system in institutions of higher learning and gives those institutions more decision-making power in running their schools; and establishes a State Education Commission to strengthen the governments' leadership role and ensure the smooth implementation of China's educational system reform.

---

[1] Ministry of Education. ***Recent Development of Education in the People's Republic of China*** (1979-1980). The People's Republic of China, September 1981.

In April 1986, the Fourth Session of the Sixth National People's Congress approved "The Law of Compulsory Education of the People's Republic of China", and the Seventh Five-Year Plan (1986-1990) for national economic development, which includes an educational development programme.[3] All these decisions will have a far-reaching influence on the development of China's education system. The important aspects of the Law and the Plan are summarized below.

The principles and objectives of education

The common task for every school at every level in China is to become geared to the needs of the nation's modernization drive to international competition and to the needs of future development. To meet the needs of the country's social and economic development in the 1990s and the earlier part of the twenty-first century, all

---

2. Decision of the Central Committee of the Communist Party of China on the Reform of the Educational Structure. ***Reform of China's Educational Structure.*** 27 May 1985. Foreign Language Press, Beijing, 1985.

3. ***The Development of Education in China*** (1984-1986) – country report, Fortieth Session of the International Conference on Education, Geneva, 1986.

schools should train new and qualified personnel for different levels and in diverse fields, who will adhere to the socialist direction. Students should be trained morally, intellectually and physically and to be discipline-abiding; they should be encouraged to permanently aspire to the pursuit of new knowledge, to think independently and to be creative.

Legislation of education. The system of educational legislation in China has been further strengthened. In addition to the sub-committee on the legal system, the Standing Committee of the National People's Congress has also set up a sub-committee on education, science, culture and public health. The State Council has expanded the scope of its legal system bureau to include the examination of regulations on educational administration.

The law of compulsory education. In April 1986, the Fourth Session of the Sixth National People's Congress examined and approved "The Law of Compulsory Education of the People's Republic of China". Under the law, the State is introducing nine-year compulsory education. All provinces, autonomous regions and municipalities directly under the administration of the central government are being required to work out measures in accordance with their local economic and cultural conditions to implement the compulsory education law, which entered into force on 1 July 1986.

The administration of education. To promote enthusiasm among the various government departments and to encourage inter-departmental and intersectoral collaboration and co-operation, it was felt that the State Council needed a unified administration system and a comprehensive organization, which would take charge of the nation's education. The former Ministry of Education was not in a position to take care of the comprehensive, overall, intersectoral planning for education. Thus, the National People's Congress decided to abolish the Ministry of Education and to set up the State Education Commission.

The ministerial position in charge of the Commission is currently held by a Vice-Premier of the State Council, who has eight full-time deputies in the Commission. Many Commission members are currently Vice-Ministers or Deputy Chiefs of the State Planning Commission, the State Economic Commission, the State Science and Technology Commission, the Ministry of Finance and the Ministry of Labour and Personnel. The Commission is now in charge of the strategies, policies and overall planning for the development of education; the organization and co-ordination of efforts to promote education; and the unified administration of the country's education system reform.

Provinces, autonomous regions and municipalities directly under the administration of the central government are empowered to decide independently whether or not they should set up their own education commissions.

With regard to the administrative system for universal education, "The Communist Party of China Central Committee's Resolution on Reform in the Educational System" clearly stipulates that local governments are authorized to administer the nation's elementary education programmes. Except for the major strategies and overall planning, which are handled by the central government, local authorities are required to take care of the entire process of drafting and implementing concrete policies, systems and detailed plans for elementary education and have the responsibility and power to guide, administer and inspect the work of local schools and institutions.

The training of educational administrators is entrusted to the Central Educational Administration Institute under the State Education Commission. The Institute is responsible for the training of administrative personnel for the country's institutions of higher learning and for employees of educational departments at the provincial, autonomous regional and municipal and prefectural levels. Administrative personnel at the country level and in the middle and primary schools are usually trained at provincial and prefectural colleges of education and at country-run teachers' training schools.

An important feature of administrative reform has been the collection of additional education funds by local governments. A circular issued by the State Council in December 1984 stipulates that as the State increases its investments in capital construction for rural schools and education funds, township authorities should collect supporting funds for education from local and agricultural enterprises and encourage various sectors and individuals to offer donations to rural educational development. Supporting funds for education are collected in accordance with incomes from sales and in other ways, but are not imposed according to population or farmland acreage. The rate and methods of collection cannot be unified; instead, the township government can make a propcsal to the local people's council in light of the township's economic situation in a particular year, local residents' capacity to contribute, and the needs of the development of education in that area.

Plans and programmes for implementation of educational policies (1986-1990)

In April 1986, the Fourth Plenary Session of the Sixth National People's Congress examined and approved the Seventh Five-Year Plan (1986-1990) for national economic and social development. The plan is crucial to the overall reform of China's economic system and to material, technological and human resource development for further economic achievements in the 1990s. One of the most important principles in the Seventh Five-Year Plan is to keep the development of science and education as a key national strategy, to promote scientific progress and to accelerate the development of technical know-how. The plan has specifically provided measures for the implementation of policies during its five year period. The highlights of some of these measures are summarized in the paragraphs that follow.

Nine-year compulsory education will be introduced gradually. In cities, coastal areas and a few advanced inland districts where about one-fourth of China's population live, popularization of primary school education will be promptly initiated especially in those countries and villages that lag behind in this respect. Universalization of junior middle school education will be carried out, with special attention goven to the qualitative and quantitative aspects. Townships and villages in the middle stages of development, which have approximately half of the nation's population, will first be required to popularize primary school education and prepare for the universalization of junior middle school education in the Eight Five-Year Plan period. In economically backward areas where the rest of China's population lives the popularization of elementary education will be achieved to a different extent. Special efforts will be made to develop pre-school education and eliminate illiteracy among the young and middle-aged populations.

The structure of secondary education will be further adjusted. While continuing to improve education in regular senior middle schools, greater efforts will be made to develop vocational and technical education and to build up a vocational and technical education system in the light of prevailing conditions and national priorities.

Further efforts will be made to readjust the structure of the proportions and levels of specialists in higher education, improve the conditions of existing schools and significantly raise the quality of higher education. The State will make a special effort to set up seven key universities, improve teaching capabilities in several key specialties and upgrade the equipment in a group of experimental and research centres.

Various adult higher educational institutions will be encouraged to train personnel up to the professional college graduate level or above. Adult secondary vocational and technical education will also be promoted further.

Efforts will be made to streamline administration, decentralize decision-making power and relax State control over various kinds of schools. Based on trial results, a new administrative system that puts institutions of higher learning under the administration of major cities will be introduced gradually. Attention will also be paid to aspects such as strengthening the work on educational legislation and the systematic evaluation and supervision of educational achievements. Radio and television education programmes will be expanded widely. Schools at all levels and all kinds will strengthen the moral, aesthetic and ideological aspects of raising and training China's students and youth.

India

The 1986 educational reform programme in India was initiated by the Ministry of Human Resource Development, Department of Education, Government of India. The Ministry published a report in 1985, entitled ***Challenge of education – a policy perspective***. which reviewed and appraised the existing conditions leading to educational reform. In 1986, the Ministry's work on educational reform was published as an official document, termed ***National Policy on Education – 1986***. This policy document pronounced the country's policy philosophy, goals, organizational structures, management methods and resources that would lead to the accomplishment of the reform goals for the whole educational system covering primary, secondary and higher education, and for all of the other socio-economic measures related to education. The policy statements provided broad directions and a conceptual framework.

After the document's adoption by the Parliament for budget allocation, the Minister then had to present a programme of action for the implementation of the policy. As a result, 23 task forces were constituted and each was assigned a specific subject covered by the National Policy on Education. Prominent educators, experts, and senior representatives of the central and state governments were associated with these task forces to prepare the programme of action document.

Process of educational reform

Origination of reform. The introductory part of the ***National Policy on Education 1986*** indicated that since the adoption of the 1968 Policy there had been considerable expansion in educational facilities all over the country at all levels. More than 90 per cent of the country's rural habitations now have school facilities within a radius of one kilometre. While these achievements are impressive by themselves, the general formulations incorporated in the 1968 Policy were not translated into a detailed implementation strategy, nor were they accompanied by the assignment of specific responsibilities or financial and organizational support. As a result, the accumulated problems of access, quality, quantity, utility and financial outlay have assumed such massive proportions that they must be tackled with the utmost urgency.

Appraisal of existing educational conditions

1. Elementary education. Inspite of a specific provision in the Constitution to endeavour to provide free and compulsory education up to the age of 14 by 1960 and several explicit commitments to the achievement of universal elementary education, progress in this sector remains far short of the target. In fact, the target itself has moved farther and farther away because of failures arising from inadequate resources or the sheer lack of a viable strategy. The country has reached a gross enrolment of 93.4 per cent at the primary level. This national aggregate figure is impressive, but it hides the tremendous disparities that exist between states, sections and sexes. In urban areas, there is overcrowding in schools and the conditions of buildings, furniture, facilities and equipment are unsatisfactory in almost all parts of the country. Rapid expansion, unaccompanied by the sufficient investment of resources, has caused a deterioration of academic standards.

The reason for the present state of affairs in education is primarily a paucity of resources. While budgetary allocations for plan expenditures for education have gone up substantially over the years, they have not kept pace with the growth in enrolment and rising prices. As a result, the total expenditure per student per year by the central and state governments has declined in real terms. More than 90 per cent of the allocation is spent on teachers' salaries and administration.

2. Secondary education. There were over 56,000 secondary schools in India in 1983. Educational statistics indicate that while the number of schools increased 14 times in 1982-1983 the number of teachers increased only 10 times. It is obvious that as the schools grow in size, the teacher-pupil ratios are being adversely affected. The pressure for expansion will continue as the country progresses towards universal elementary education. Although anyone in India who wishes to pursue secondary education may do so, not more than half of those who pass the elementary stage enroll in secondary classes.

There is also a problem of equity. Science and mathematics should be available for girls as well as boys in all secondary schools, so that students have equal opportunities to get into scientific and technological professions. Unfortunately, in many parts of the country, a discriminatory situation is being created in the scientific and technological professions in favour of the urban and more affluent sectors of the society.

The variability in educational standards and quality and the wide divergence in curricula in different schools are also causes for concern. Today, higher secondary schools are saddled with the unenviable task of receiving graduates from a less-than-satisfactory system of elementary education and preparing them for secondary education. This task cannot be accomplished with adverse teacher-pupil ratios, outdated methods of teaching, poor laboratory facilities, an uninspiring curriculum and a management system that discourages innovation.

3. Higher education. In terms of absolute numbers, India has a large system of higher education because of its large population. However, only 4.8 per cent of the relevant age group is enrolled in higher education programmes. The percentage is even less in some regions, particularly for women, scheduled castes and tribes. Rural

areas have been touched only marginally by higher education of quality. Efforts to encourage science, technology and other professional courses at various levels have not met with much success.

The facilities provided in universities and colleges vary widely. Research in the universities is cost-effective, but large contracts have gone to laboratories outside the universities. Courses offered by the universities have not been reorganized to meet the demands of the times; their relevance and utility are constantly questioned. The credibility of the evaluation system is being eroded, and large number of those who pass the entrance examination are classified under a 'third division', which is another index of low standards.

The internal efficiency of the higher education system is extremely low. This is evidenced not only by the poor quality of available courses but also by the large number of dropouts and failures, which together account for more than 59 per cent of the students enrolled and represents a colossal waste of resources.

Goals of educational reform. This appraisal of the existing conditions of education have led to a defining of the goals of educational reform, which must be considered from three interrelated approaches.

First, the role of education as a whole has an institutional character, which is expected to go beyond its main function of imparting education to pupils. The system is expected to generate new knowledge in all fields. It must evolve the principles, methodologies and guidelines to apply this knowledge for the benefit of society. Research and development must be accepted as essential ingredients of the educational process.

Second, emphasis has to be laid on the socio-economic wellbeing, competence and creativity of the individual.

Third, education has to play an important role in integrating the individual into the social system. It should also inculcate suitable habits for health care, mental application, time management and the conservation of physical, mental and emotional energy.

Education can be the most effective means for equalizing opportunities and reducing disparities between human beings. In a democratic society, it is considered a fundamental right of citizens. Ultimately therefore, the aim of reform must be to enlarge the coverage and improve the quality of education in educational institutions so that any person from any region, caste, creed, sex or economic strata has the chance to develop his or her potential to the fullest.

Strategies for implementation

The National Policy on Education 1986 addresses the following strategies for educational reform implementation.

National system of education. The concept of a national system of education implies that all students, irrespective of caste, creed, location or sex, have access to education of a comparable quality. To achieve this, the Government will initiate appropriately funded programmes. Effective measures will be taken in the direction of the common school system recommended in the 1986 Policy. The national system of education will be based on a national curricular framework, which contains a common core along with other flexible components. To promote equality, it will be necessary to provide equal opportunities to all not only in terms of access, but also in the conditions for success. In addition awareness of the inherent equality of all people will be created through the core curriculum.

The nation as a whole will assume the responsibility of providing resource support to implement programmes of educational transformation, reduce disparities and to universalize elementary education, adult literacy and scientific and technological research.

Education for equality. The new Policy will particularly emphasize the removal of disparities and the equalization of educational opportunities by attending to the specific needs of those who have been denied equality so far. The strategies and measures aimed at these target groups include:

1. Education for women's equality;
2. The education of scheduled castes;
3. The education of scheduled tribes;
4. Education of other educationally backward sections and areas;
5. Minority education;
6. Education for the handicapped;
7. Adult education.

Elementary education. The new thrust in elementary education will emphasize two aspects: universal enrolment and universal retention of children up to 14 years of age, and a substantial improvement in educational quality. Broad strategies and measures will include:

1. Child-centred approach. A child-centred, activity-based learning process should be adopted at the primary stage. First-generation learners should be allowed to set their own pace and be given supplementary remedial instruction. As the child matures, the component of cognitive learning will be increased and skills will be organized through practice. The policy of non-detention at the primary stage will be retained, making evaluation as disaggregated as possible.

2. School facilities. Essential facilities will be provided for primary schools, including at least two reasonably large rooms that are usable in all weather and necessary toys, blackboards, maps, charts, and other learning matérial. At least two teachers, one of whom should be a woman, should work in every school. The number of teachers should increase as soon as possible to one teacher per class. A phased programme, symbolically called **operation blackboard,** will be undertaken immediately to improve primary schools all over the country. Government, local bodies, voluntary agencies and individuals will be fully involved.

3. Non-formal education. A large, systematic programme of non-formal education will be launched for school drop-outs children from habitations without schools, working children and girls who cannot attend whole-day schools. Talented and dedicated young men and women from the local community will be chosen to serve as instructors, and particular attention will be paid to their training needs.

Secondary education. The policy relating to secondary education implies extension of the school system into unserved areas, consolidation of existing facilities and special arrangements for gifted children and high achievers. Conscious internalization of a healthy work ethic and of the values of a humane and composite culture will be brought about through appropriately formulated curricula. Vocationalism through specialized institutions or through the restructuring of secondary education can, at this stage, provide valuable manpower for economic growth.

Higher education. The National Policy on Education visualizes higher education as more dynamic than it has never been. The main features of the programmes and strategies required to impart the necessary dynamism to the higher education system will consist of the following:

1. Consolidation and expansion of institutions;
2. Development of autonomous colleges and departments;
3. Re-designing courses;
4. Training of teachers;
5. Strengthening research;
6. Improvements in efficiency;
7. Creation of structures for co-ordination at the state and national level;
8. Initiation of an open university system to augment opportunities for higher education and to use it as an instrument for democratizing education.

The Management of Education. An overhaul of the planning and management system for education will receive high priority. The guiding considerations will be:

1. Evolving a long-term planning and management perspective for education and integrating it with the country's developmental and manpower needs;
2. Decentralization and the creation of a spirit of autonomy for educational institutions;
3. Giving pre-eminence to people's involvement, including the association of non-governmental agencies and voluntary efforts;
4. Inducting more women into the planning and management of education;
5. Establishing the principle of accountability in relation to given objectives and norms.

National level. The Central Advisory Board of Education (CABE) will play a pivotal role in reviewing educational development, determining the changes required to improve the system and monitoring reform implementation.

State level. State governments may establish State Advisory Boards of Education on the lines of CABE, with special attention given to the training of educational planners, administrators and heads of institutions.

District and local levels. District Boards of Education will be created to manage education up to the higher secondary level. Within a multi-level framework for educational development, the central, state, district and local level agencies will participate in planning, co-ordination, monitoring and evaluation.

Resources for policy implementation

Education will be treated as a crucial area of investment for national development and survival, such that from the Eight Five-Year Plan onwards educational investment will uniformly exceed 6 per cent of the national income.

Monitoring and evaluation

The implementation of the various parameters of the ***National Policy on Education, 1986*** must be reviewed every five years. Appraisals at short intervals will also be made to ascertain the progress of implementation and the emerging trends.

Japan

Beginning around 1984, the general public in Japan began to sense the increasing manifestation of what was referred to as 'pathological symptoms' of 'desolation' in education.

These symptoms were manifest in such actions as: insidious school bullying, children's suicide, children's rejection of school, juvenile delinquency, school violence, home violence, excessive competition in entrance examinations, and corporal punishment.

Four major factors were identified as the contributing factors to this desolation in education.

1. Excessive competition in entrance examinations. This factor is closely related to Japanese employment practices, whereby both the public and private sectors tend to recruit their new employees from reputable universities or colleges. As a result, excessive emphasis is placed on preparing children for school entrance examinations. Many students are compelled to attend cram schools or 'juku', which seems to have adversely affected the physical and mental health of children enrolled in elementary and secondary school.

2. Uniformity of the content and methods of teaching in schools. As a whole, schools in Japan have traditionally placed value on efficiency, and thus have adopted curricula and methods of teaching that are largely uniform for all children. This practice combined with the general attitude of the Japanese people, which strives for social conformity and places great value on formal equality, has led to the present situation in which all secondary school students, despite differing abilities, competencies and interests, are given very uniform instruction using similar curricula, teaching materials and teaching methods. Under these circumstances, slow learners are unable to keep up with classroom learning and are labeled 'failures', while gifted and talented students find that their classroom lessons do not satisfy their interests and abilities. In sum, the need for educational practices on the basis of individual differences has been ignored.

3. Negative side-effects of the development of a modern industrial civilization and the high-rate economic growth in post-war Japan. The post-war economic growth rate in Japan, in parallel with notable developments in science and technology and industrialization and modernization, has brought material affluence, convenience and an improved level of individual welfare. This affluence has also created various negative pathological phenomena such as: environmental pollution, declining morale of workers, the breakdown of the home and the community.

   These phenomena have had a great impact upon the education of children. The realization of 'material affluence' has caused a weakening of such qualities as self-reliance, self-restraint, a sense of responsibility, and consideration for others. The present 'desolation' of children's minds seems to be deeply related to the fact that the education sector has neglected to deal properly with the negative side-effects of affluence.

4. The social climate prevalent in Japan after World War II. A fundamental principle in a democratic society is that freedom and rights must be accompanied by responsibilities and duties. This principle may often have ben neglected in Japan in the educational sector and by the society. Among

the other problems that created the call for educational reform is the deterioration of the educational functions of the home and the community. Moral education and discipline are no longer being sufficiently provided in these environments.

Organizational body for educational reform

The existing conditions and concerns mentioned above led to a call for educational reform from all segments of Japan's society. To respond to this call, the National Council on Educational Reform was established in August 1984 as an advisory body to the Prime Minister. The Council has 25 members who are appointed by the Prime Minister, and who represent all segments of the population including universities, industry, labour and schools. In December 1984, 20 specialist members were appointed to participate in the Council's deliberations on relevant specialized matters. The working period for the Council is three years. Under its current policy, the Council presents a series of successive reports as soon as a consensus is reached on particular issues.

Direction and process of educational reform

The present direction of educational reform in Japan was begun in 5 September 1984, when Prime Minister Yasuhiro Nakasone appointed the Council and asked it to advise him on the best ways to secure an educational programme that would be compatible with the social changes and cultural development of the country into the twenty-first century.

The Council published and submitted a series of four reports to the Prime Minister: First Report on Educational Reform, 26 June 1985; Second Report on Educational Reform, 23 April 1986; Third Report on Educational Reform, 1 April 1987; Fourth and Final Report on Educational Reform, 7 August 1987.

In the three years after its inauguration, the Council carried on an active dialogue with the public in an effort to meet its great expectations for education reform. The dialogue was held by organizing 14 public hearings in different regions throughout the country and by publishing four interim reports of the progress of its deliberations. The deliberations by the Council provided an opportunity for an unprecedented national debate on educational reform – a great symposium on education.

Based on the first report published in June 1985, the Council identified the following basic concepts required to promote an educational reform that could cope with economic and social change into the twenty-first century:

1. The principle of putting emphasis on individuality;
2. The principle of putting emphasis on fundamental, which are the skills necessary for children to continue learning their lifetime;
3. The cultivation of creativity, thinking ability and the power of expression;
4. The expansion of opportunities for choices in Japan's educational system, particularly at the upper secondary and higher education levels;
5. The humanization of the educational environment, both human and material;
6. The transition to a life-long learning system that is able to deal with the increasing desire of people to achieve self-realization in the context of both the aging of the population and the sophistication and diversification of people's value systems;
7. Coping with the age of internationalization by upgrading the level of educational and research activities at universities, making these activities more open to the international community, and transforming these institutions into ones which are able to contribute to the development of science and culture and to the training of qualified human resources in the world;
8. Coping with the information age in the light of two aspects: the first is how the educational system should make use of the outcomes of information science and technology; the second is how the educational sector should deal with the negative impact of information technology on human beings.

Strategies and measures for educational reform

The Council recommended a number of concrete measures for educational reform in light of the present state of and future prospects for education. To summarize, these included:

Development of life-long learning structures. To correct the adverse effects of undue emphasis on the educational background of individuals and the evaluation of individuals on the basis of diverse factors, the evaluation of individuals should be corrected and proper attitudes should be formulated so that genuine learning outcomes gained 'at anytime and anywhere' can be duly assessed.

It is necessary to create educational and social systems that provide various learning and occupational opportunities, both in the formal education system and in various sectors of the society, to those people who failed to obtain suitable academic qualifications or occupational positions in the earlier stages of their life.

Attention should be given to the diverse abilities of individuals, and persons of outstanding ability should be positively evaluated. Full attention should be paid to the problems of over-emphasizing a single particular indicator in an evaluation. The existing systems for granting official vocational qualifications and the practice of recruitment and personnel management in industrial firms and government offices should be reviewed to introduce an evaluation process based on diverse factors.

The functions of the home, school and community and co-operation among the three parties should be activated.

Sports programmes and participation should be promoted.

To ensure the development of an infrastructure for life-long learning, parents should develop a basic relationship of mutual trust with their children in early childhood and help them acquire the basic manners and customs required for social life.

The diverse learning activities of people need to be invigorated and diverse opportunities for non-formal education developed. To help people acquire new knowledge and techniques in the changing society and economy, universities and other educational institutions need to secure better co-operation with the society at large and to accept working adults more actively.

To expand learning opportunities for people in the community, the University of the Air should endeavour to develop new modes of teaching and learning.

Various government measures should be taken to promote sporting activities in respective communities and workplaces.

It is necessary to develop 'life-long learning towns' based on the distinctive characteristics of the locality. These community structures should be spread throughout the country with all community people co-operating in promoting life-long learning activities, so that they may carry out diverse activities on their own initiative to realize a fulfilling life.

Enrichment and reform of elementary and secondary education. The Council proposed that attention be paid to diversifying the content and methods of instruction, from the viewpoint of stressing the need to suit education to the differing abilities, aptitudes and other qualities of individuals. In response to this recommendation, the Curriculum Council, an advisory body to the Minister of Education, Science and Culture, is now revising the national curricular standards for elementary, lower secondary and upper secondary schools with an emphasis on: the cultivation of children's eagerness for independent learning, the capacity of children to adapt themselves to changes in society, freedom of choice in subjects as students advance to the upper grades, and strengthening instructional methods, which will contribute to the full individual development of each child.

Various efforts should be made to encourage schools to concentrate not only on the intellectual aspect of education but on the development of well-balanced characters. Emphasis should be placed on the teaching of basic manners and habits, the development of self-control and a willingness to follow social norms, and the development of a good attitude towards life. Strategies and measures in this area should include the promotion of empirical learning activities in the natural environment, a review of the content of moral instruction as a concrete part of the elementary and lower secondary school curriculum, the concentration of this moral instruction on certain essential matters, encouragement of the use of appropriate supplementary teaching materials, and the improvement of initial and in-service teacher training.

In reforming the textbook systems, the content of textbooks and the methods for using them should be reviewed and diverse approaches should be promoted in teaching and learning with due regard for the individuality of students.

Regarding improvement of the quality of teachers, the Council pointed out that teacher quality consists four main characteristics:

a teacher's sense of mission, his or her love for children, a broad and profound grasp of knowledge and competence in practical teaching.

It suggested that the content of the professional and other subjects offered as part of teacher education should be revised to help teachers cope with the recent changes in the mental and physical conditions of school children and with the changing curriculum of elementary and secondary schools.

Provisions for exceptions should be included in the teacher certification system, so that excellent people with an enthusiasm for educational activities may be attracted to the teaching profession.

In-service training programmes for beginning teachers should be created so that these teachers may improve their competence in practical teaching and develop a firm sense of mission.

In-service training programmes for teachers should be undertaken at regular intervals throughout the teacher's professional career.

To improve the environmental factors that affect education, the Council suggested the following strategies and measures. To help humanize the educational environment, excessively large schools should be eliminated. The current plan for reducing the maximum class size to 40 for elementary and lower secondary schools should be fully implemented as an immediate goal. Improvements should be planned for physical school facilities and equipment to cultivate well-balanced personalities and to make facilities and equipment adaptable to a variety of teaching methods.

A more flexible structure for upper secondary education was recommended. A six-year secondary school should be introduced, which is designed to contribute to the continuous and progressive development of student personalities by combining existing lower secondary and upper secondary education programmes and thus providing a consistent education suitable for adolescents.

A new type of upper secondary school, termed a credit-system upper secondary school, should be established that will recognize the acquisition of credits for each subject and can grant graduation qualifications from upper secondary school on the basis of the total number of credits acquired by each student in various subjects. To promote the development of individuality and distinctiveness in individual upper secondary schools, each school should be encouraged to secure and use more diversified and distinctive selection methods and criteria in selecting entrants.

In the promotion of pre-school education and special education for the handicapped, flexible management methods should be implemented for kindergartens and day nurseries. Handicapped children should be allowed to receive an education that is adapted to the type and degree of their handicaps, without isolating them from their families or their community. In addition, handicapped people should be given more opportunities for employment and life-long learning by enhancing the programmes at various vocational training centres, which are aimed at the development of their vocational capabilities.

In opening schools to society and ensuring appropriate administration and management of schools, a relationship of mutual collaboration should be established among schools, families and the community based on the perception that schools are the common properties of community people. To this end, school facilities should be opened to the community.

'The nature study programme' should be positively promoted through the educational activities of the schools, so that children may keep and improve their energy and vitality, enhance their mental and physical health, and cultivate a sense of reverence and a sensibility for life and nature.

Each municipal board of education should introduce innovations that respond to the parents wishes to have their children receive an education which is suited to them. Specifically and immediately such measures may include: increasing flexible attendance areas that allow parents to choose a school; increasing the possibilities for child to attend a school outside their designated attendance area; developing the machinery to give parents an opportunity to express their wishes beforehand and allow them to make complaints against the designation.

For a school to maintain its vitality and discipline, the duration of service for a principal in any one school should be lengthened and the appointment of relatively young, competent teachers to administrative positions should be encouraged.

In the management of schools, principals and teachers should adequately absorb the views and wishes of parents and the community.

Schools need to eliminate excessive controls over students that are based on teachers obsession with formality or their emphasis on trivial rules and to restore a fair atmosphere based on a balance of freedom and discipline. Schools also need to eliminate corporal punishment.

Upon receiving the Council's recommendations, the Ministry of Education, Science and Culture has urged all prefectural and municipal boards of education to respond positively to the recommendations. The Ministry is now examining the appropriate improvements for the legal and administrative frameworks, which are needed to facilitate the solution of administrative and management problems, for instance, by reinforcing the status of the municipal superintendent of education.

Diversification and reform of institutions of higher education.

1. To enrich and individualize institutions of higher education, universities should be allowed to develop distinctive structures for education and research, free from the traditional frameworks.

Using the diversification of higher education institutions and mutual co-operation among them as aims, the government should study the following measures: diversifying the departments and curricula in junior colleges and giving more flexibility to the content of education in these colleges; expanding the categories of courses in colleges of technology so that they may offer courses other than the existing engineering and mercantile marine courses.

2. To strengthen graduate schools, they should be drastically improved and reformed to develop an adequate number of creative researchers, meet social demands for highly qualified professionals, and make more contributions to the international community with respect to scientific research.

Consideration should be given to making the standard length of a graduate course more flexible. Graduate schools should admit more adult citizens. Consideration should be given to allowing excellent students to enter graduate school after they have completed the third year of an undergraduate course.

Regarding the structure of graduate schools, diverse patterns, including 'independent graduate programmes or schools' and interdisciplinary graduate departments, should be encouraged.

Students should be allowed to obtain a Doctor's degree more easily. The existing system for academic degrees should be reexamined.

In response to these recommendations, the Advisory Committee on University Reform is now considering concrete measures for implementing the recommendations.

To reform the procedures for selecting university entrants, every university should attempt to reform the content and methods of its entrance examination with the aim of ensuring an independent and distinctive selection process. The existing 'Joint First-Stage University Entrance Examination' now required for all applicants to national and local universities should be replaced by a new 'Common Test' that is to be used voluntarily by any university: national, local or private. Universities are expected to make use of this test in their own way. Such diverse selection procedures are expected to enable upper secondary school graduates to choose the university that is suited to their personalities, abilities and aptitudes.

The positive promotion of scientific research involves: promotion of basic research in universities; strengthening co-operation between universities and the society; promotion of international exchanges for scientific research.

The Council has recommended the establishment of a national council on universities and colleges.

To finance higher education, more flexibility should be given to the budgeting and accounting systems and practices in national universities. Individual national universities should be encouraged to set up their own funds and affiliated foundations, so that they may be given more financial autonomy and under such conditions give full scope to their initiatives in financial management.

The recommended strategies and measures for the organization and management of universities involve:

Securing the autonomy and self-control of individual universities; and encouraging universities to become more active in offering extension courses, lectures for citizens and other activities for community service, in making their facilities available to citizens, and in admitting working adults as students.

Reforms for coping with internationalization.

1. Fostering mutual understanding and respect for different cultures, societies and values through the free exchange of students, teachers and researchers and learning from one another.
2. Promoting educational co-operation with developing countries, which includes: improving and enriching the system for accepting foreign students; co-operation for the training of researchers in developing countries; multi-lateral co-operation through Unesco; technical co-operation with developing countries.

Reforms for coping with the information age.

In an information-oriented society, individuals are required to become fully aware of the impact the information they dispatch may have on other people and society in general. To foster such awareness, new systems of teaching and learning should be created, which are relevant to the information-oriented society.

The utilization of information media in all levels of education and the cultivation of experts for the information age should receive considerable attention in the reform process.

Reform of educational administration and finance.

Reforms in the system of government standards and approval include:

1. Review of national regulations on standards, such as the national standards for the establishment of universities and the courses of study for elementary and secondary schools. It is advisable that these regulations be flexible enough to enable individual educational institutions to implement creative and innovative ideas and practices;
2. Promotion of the establishment of private elementary and lower secondary schools.

To promote decentralization, the roles of national and local governments should be reviewed and the roles of local boards of education should be revitalized and fulfilled.

Regarding educational costs and the financing of education, preferential allocation of resources should be given to education, research, culture and sports. A new division of roles between the public and private sectors, as well as co-operation between the two sectors, should be secured.

More rationalized and efficient educational financing should be pursued and the energy of the private sector utilized to the fullest. It is important to alleviate the financial burden on parents for their children's education.

Implementation of educational reform.

Finally, the Council's recommendations on the implementation of Japan's educational reform programme placed the responsibility for the reform's success on every level. Thus, to ensure the implementation of educational reform, the government should take all possible measures using the best possible mechanisms. The Ministry of Education, Science and Culture should develop a powerful mechanism and actively carry out relevant measures with the aim of implementing educational reform in accordance with the recommendations made by the Council. The local boards of education and local governments must make positive efforts towards educational reform using their own judgment and on their own responsibility. To make educational reform truly effective, the government will need to take the appropriate financial measures to bring about educational reform.

Republic of Korea

In March 1985, Korea initiated its educational reform for the twenty-first century as the Presidential Commission for Educational Reform, the body responsible for educational reform, was appointed by the President.[1] The Commission comprised 32 professionals representing education, social affairs, economy, industry, journalism and science. In addition, another 20 members having educational specializations were also appointed to the Commission.

---

[1] The Presidential Commission for Education Reform in Republic of Korea. *Strategies for educational reform.* 30 August 1986.

In principle, the Presidential Commission for Educational Reform has the following consultative functions and roles:

1. Survey and respond to public opinion regarding educational issues;
2. Examine problems in the overall aspect of the educational system;
3. Survey, formulate and deliberate policy measures for educational reform;
4. Establish a framework of educational policies and short- and long-term educational development plans.

To achieve educational reform goals in Korea, the Educational Reform Committee structure was divided into four sub-committee:

1. The Committee for Education Systems deals with aspects and issues relating to school systems, entrance examination systems; private education, science education, technical education and education for gifted children and local autonomy in educational administration;
2. The Committee for Primary and Secondary Education is entrusted with tasks relating to pre-school education, compulsory education and secondary education, curriculum and instruction, teacher education and moral education and juvenile guidance;
3. The Committee for Higher Education is responsible for matters relating to junior colleges, colleges, universities and graduate schools; institutional autonomy and academic freedom; optimization of higher education enrolments; excellence in higher education; and the development of higher education in provinces and local areas;
4. The Committee for Educational Development is concerned with education ideals relevant to the indigenous setting, life-long education, educational facilities and the environment and educational administration and finances.

The Presidential Commission for Educational Reform also set out the goals for educational reform, which are to realize the attributes of an educated person as defined by the new challenges in the twenty-first century. Such a person would have self-reliance, creative ability and moral principles where:

1. Self-reliance implies preparedness to determine one's own destiny, a self-awareness of one's historical and cultural heritage and a patriotic love for the nation and its people;
2. Creative ability comprises a creative quest for the unknown, flexible thinking, an ability to judge rationally, an ability to respond to change positively and productive ability;
3. Moral principles include sound ethical awareness, democratic citizenship, aesthetic sensitivity, community awareness and an international orientation.

The major principles of educational reform adopted by the Presidential Commission include:

1. Education to nurture pride in being Korean. Education designed to make Koreans proud of being Koreans and dedicated to inheriting their traditional culture with a creative mind;
2. Education to produce a whole person. Educational focus will be shifted from basic knowledge acquisition to the development of attributes needed to become a whole person, emphasizing balanced treatment of intellectual and physical growth;
3. Education to develop creativity. Education designed to help individuals stretch their creative potential to the fullest measure;
4. Future oriented education. Education designed to prepare youngsters for the new needs which are associated with the knowledge explosion, social transformations and the mandate of national reunification;
5. Pursuit of excellence. Qualitative development of education will be sought to facilitate the fullest utilization of individual potential;
6. Promotion of diversity. Efforts will be made to introduce the flexible operation of school education, allowing for a wide variety of educational programmes and eradicating conventional operations that breed uniformity;

7. Enhancement of autonomy. Educational administration will emphasize the autonomy and accountability of schools and will shift away from dependence on higher authorities and bureaucratic control;
8. Humanization of educational environment. The educational environment will be improved to ensure that children receive the joy of learning through humane interaction with their teachers;
9. Strengthening society's educational functions. The present educational system, which is dependent school education, will be changed into a system in which the whole society positively participates and supports educational activities.

The Presidential Commission also came up with a policy agenda for educational reform to ensure the effective implementation of the goals and objectives of the reform. The agenda comprises:

1. Primary and secondary education to include: curriculum reform; school education with respect for individuality; strengthening guidance and vocational education; boosting the quality and morale of teachers; autonomous operation of schools; improvement of the educational environment and educational financing;
2. Higher education comprising: pursuit of excellence in education and research; enhancement of autonomy in university management; diversification of the university system and its operation; increased efficiency of the support system;
3. Social environment to include: reorientation of people's awareness and perception of education to relieve the blind pursuit of education resulting from a mistaken views about education; encouragement of the educative milieu of society to turn home, school and society into a unified field of learning, thus working toward the systematic implementation of life-long education.

SECTION THREE

SPECIAL AREAS AND ISSUES IN EDUCATIONAL REFORMS

Bulletin of the Unesco Principal
Regional Office for Asia and the Pacific
Number 29, 1988

DISTANCE EDUCATION IN THAILAND*

Introduction

In Thailand, distance education systems have gained enormous popularity in the past decade. Several institutions have established distance education programmes to provide open access to education throughout the country. The Department of Non-Formal Education, the Teacher Training Department, Ramkhamhaeng University and Sukhothai Thammathirat Open University are among the key institutions that offer open distance education and have large annual enrolments. As part of the effort to reform the conventional education system, innovative strategies have been developed to provide flexible self-instructional methods for students scattered over a broad area. Different media technologies are utilized to deliver the open distance education programmes. This paper presents a case study of the development of an open distance education system by the Department of Non-Formal Education under the Ministry of Education.

Background

Equality in educational opportunities has been a major concern of Thailand's national development plans. Approximately 20 per cent of the total population attends formal education programmes. A large number of the dispersed out-of-school population, particularly in the remote, rural areas, still lack access to educational services. Continuous and intensive efforts have been made to expand the educational services of both the formal and non-formal education systems to this group.

In response to the nation's educational policy and the increasing demand for education of the disadvantaged population, the Department of Non-Formal Education initiated a multi-media, open distance education programme called the "Radio Correspondence Project". It began operation in 1977 as an experimental programme. Since then, the project has gradually developed into a major system of continuing education for the country's out-of-school population. The objectives of the project are to:

---

* Dr. Sanong Chinnanon, Chief of Research and Evaluation Section, Planning and Research Division, Department of Non-Formal Education, Ministry of Education, Bangkok, Thailand.

1. Provide open distance education programmes for the out-of-school population, so they may pursue continuing education at primary and secondary education levels;
2. Utilize multi-media and communication technology in disseminating current information and knowledge to students at a distance and to general audiences;
3. Promote literacy and upgrade the educational standard of the out-of-school population.

Current Implementation of the Project

In 1987, as part of the reorganization of the non-formal education programmes, the Radio Correspondence Project was renamed the "Distance Education Project". To illustrate the project's current implementation, the following discussion includes the overall operational model, the production of multi-media distance education materials, the management of the Distance Education Project and the enrolment and graduation of the students in the project.

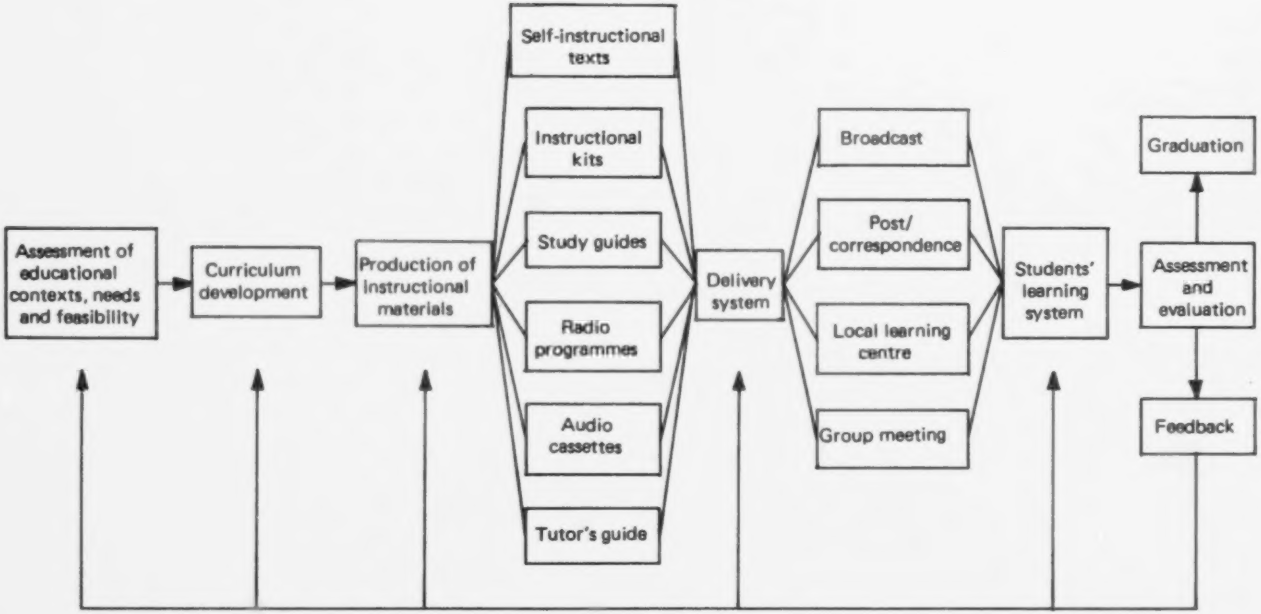
The overall operational model for the project

The operational model of the Distance Education Project (see Figure 1) begins by assessing the educational contexts, identifying the educational needs of individuals and society and exploring the feasibility of implementing distance education programmes in Thailand.

The second step is the design and development of the curriculum. The structure of the subjects and courses, and the specific objectives and content outlines of each unit of instruction have to be designed and developed. In 1987, the Department of Non-Formal Education approved new curricula for lower and upper secondary education (grades IX and XII) to be used for nationwide distance education programmes.

The production of distance education materials is a major component of the operation. A multi-media instructional approach has been adopted in the Distance Education Project. The production of instructional materials involves radio programmes, audio cassettes, self-instructional texts, study guides, self-instructional kits, manuals for tutorials and group meetings, as well as other supplementary materials.

Figure 1. The Operational Model for the Distance Education Project


Assessment of educational contexts, needs and feasibility
Curriculum development
Production of instructional materials
Self-instructional texts
Instructional kits
Study guides
Radio programmes
Audio cassettes
Tutor's guide
Delivery system
Broadcast
Post/ correspondence
Local learning centre
Group meeting
Students' learning system
Assessment and evaluation
Graduation
Feedback

After the production of distance education materials, the next step involves the instructional delivery system. Broadcasting, post and correspondence, community learning centres, tutorials and group meetings are the major delivery channels used for the project. Radio programmes are mainly broadcast at the National Education Radio Network (the second network) and at the Ministry's Educational Radio Station.

The fifth step involves the learning system for students at a distance. For each unit of instruction, the students have to study printed materials and complete all assignments, listen to the related radio programme or audio cassette, meet their tutor or group organizer and attend a local group meeting.

The sixth step is the assessment of students at a distance. Each semester, the Department of Non-Formal Education conducts a national examination for students enrolled in upper secondary education. For the primary and lower secondary education groups, regional examinations are administered to assess the learning achievements of the students in each region. Mid-term and other minor examinations are organized at the provincial level. Students can register for the examinations at the local learning centres or at the specified examination locations near their residence.

The next component relates to students' graduation. After the students have completed all the courses and fulfilled the requirements of the curriculum, they are awarded certificates for completion of their enrolled educational programme. The duration of each educational level is open, depending on the student's abilities and the availability of their time for study. However, on an average, each level takes about two to four years to complete.

The final step of the operational model deals with project evaluation. In fact, evaluation is integrated into all components of the model including context, input, process and product. It provides feedback information at all stages of the operation.

The production of multi-media distance education materials

The design of instructional media. The instructional materials for the Distance Education Project are designed to support self-instructional processes. In this multi-media project, printed material has been a prime medium of instruction for each unit of the course. The printed instructional material for the project, which comprises extensive programmed texts, is not yet complete. Generally, the printed instructional materials include the following components: title of the units; specific learning objectives; major concepts; content; summary of the key concepts; exercises and drills; self-assessment; additional assignments; follow-up activities; issues for group discussion; and suggested additional reading.

Radio programmes using such common formats as lectures, interviews, discussion, dramatization, documentary, feature and magazine programmes are also part of the Distance Education Project. Radio is used primarily to provide additional up-to-date information, summarize the key concepts of lessons, present additional drills and exercises (especially in language courses), answer questions from students, provide a correspondence medium and deliver guidance messages.

Selected radio programmes are duplicated onto audio cassettes and distributed to the existing community learning centres, where students can study them at their own convenience. The production of distance education materials also covers students' study guides, instructional kits and tutors' manuals.

Course team or course committee. To produce multi-media instructional packages, course teams or course committees have been established at the central and regional offices. Each course team is responsible for producing all of the instructional materials for a course. The team is made up of two sub-groups: the printed material production group and a broadcasting materials production group. The printed material production group consists of a content specialist, an instructional designer and writer, an artist or graphic designer and an assessment specialist. The broadcasting material production group includes a programme producer, a script writer, a narrator, performers and a studio technician. Both groups have to work harmoniously as a team. The whole process of course-material production is under the supervision of the team leader for each course. The main reason for having a course team is to establish a link or to integrate all instructional materials so that they support and complement each other effectively.

The production process for distance education materials. The process of material production in the Distance Education Project (see Figure 2) begins with an analysis of the course structure, which is broadly indicated in the curriculum. The number of instructional units in each course is designated and specific learning objectives are formulated. The next step is to make a detailed outline of the content of each unit. Selecting the appropriate instructional media that will be used to convey the course content is another step of the production process. In preparing the content outline, the course team must also plan for the number of printed instructional lessons and broadcasting programmes that will have to be produced, as well as determine the content in each one of them. The production plan also considers what other support materials should be produced for the lessons.

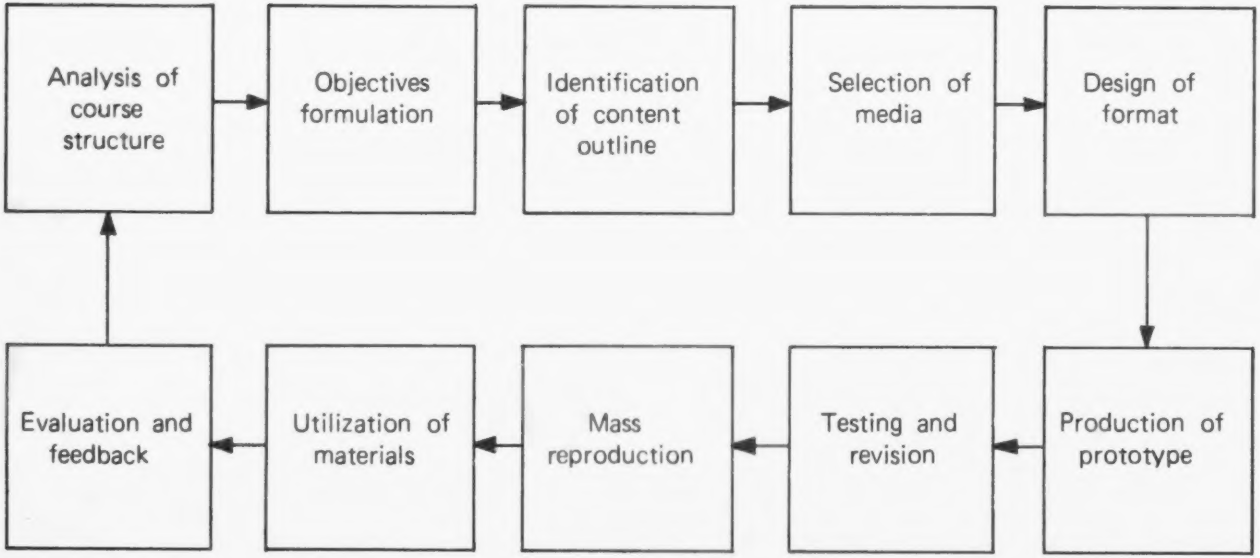
The next step involves designing an appropriate format for the instructional materials. The format of the printed instructional materials is generally fixed, but radio programmes and other instructional materials need specific and elaborate designs to ensure an appropriate format. For example, some material in a radio broadcast may be best presented in the form of an interview or discussion; others may be more suited to documentary and magazine formats. After designing the formats for the instructional materials, a prototype can be produced and tested. The feedback is used to revise the prototype before the actual mass reproduction of the instructional materials. The usage of the materials for distance teaching is another step in the process. Finally, an evaluation is conducted to provide feedback for the course team to use in future productions of instructional materials.

The management of the Distance Education Project

Various divisions and regional and provincial centres under the Department of Non-Formal Education play significant roles in implementing the Distance Education Project. The central department is in charge of formulating policies, budgeting, co-ordinating and monitoring the overall implementation of the project. The Centre for Educational Technology and the Division of Non-Formal Education Development are responsible for producing the instructional materials.

The regional non-formal education centres are in charge of training provincial personnel, including local tutors and group organizers. The regional centres also produce additional instructional materials to supplement those that are centrally produced. Regional

Figure 2. The Production Process for Distance Education Materials


Analysis of course structure
Objectives formulation
Identification of content outline
Selection of media
Design of format
Production of prototype
Testing and revision
Mass reproduction
Utilization of materials
Evaluation and feedback

examination papers for primary and lower secondary education are also produced by the regional centres.

The provincial non-formal education centres are key organizations in managing the Distance Education Project. The centres are responsible for student registration and records, the management of tutorials and group meetings and the administration of examinations.

Student registration and records. Students can apply for and enrol in distance education courses at the provincial centre in their province. Application and registration can also be done through the postal service. All student registration and academic records for the Distance Education Project are filed at the Registration and Records Office of the provincial centre.

The management of tutorials and group meetings. The provincial centre selects the local tutors or group organizers, who attend a pre-service training course at the regional centre. The trained tutors or group organizers are recruited to organize tutorial sessions and group meetings for the students under their supervision. The tutorials and group meetings can be conducted in different ways:

1. Individual tutorial is designed for each student to meet his or her tutor;
2. Weekly group meetings allow students to meet, discuss and help each other in solving their problems. In the weekly meetings, the students perform the group activities and assignments indicated in the instructional materials. Weekly group meetings are normally organized for a weekend by the local group organizers;
3. Monthly and once-a-semester group meetings are organized by the provincial centre to allow scattered learners, who can not participate in the weekly group meetings, to attend the sessions. These meetings are normally large and intensive.

The administration of examinations. A provincial examination committee is formed to administer the semester examination. The examination centres are established at the district level, and students can register for the examinations at the nearest centre. The examination papers are marked and the results announced at the provincial centre. The students are also informed by post of the results of their examination.

Enrolment and graduation. In 1987, a total of 88,937 students enrolled in the Distance Education Project. The enrolment numbers are classified by educational levels as follows:

1. Primary education: 17,460 students;
2. Lower secondary education: 54,489 students;
3. Upper secondary education: 16,988 students.

At the end of each semester, a list of those students who completed the programme and fulfilled the graduation requirements is announced and mailed to the students on the list. Certificates are awarded at the provincial centre. In 1987, 12,568 students graduated from the project. Graduation figures at the primary education level were 2,834; at the level of lower secondary education there were 9,306; and for upper secondary education there were 428. The graduation figure at the upper secondary level was small because it was a pilot project. Nationwide operation of the level began in 1987.

Evaluation of the Distance Education Project

Several studies have been conducted to evaluate the Distance Education Project. The empirical findings include the nature of students at a distance, the utilization of multi-media in distance learning, the costs and impact analysis of the project. Some of the findings are summarized below.

The nature and characteristics of the students in the Distance Education Project

Approximately 80 per cent of the students in the project are young adults whose ages range from 14-25 years. Female students account for 55 per cent of the enrollees. The main occupations of the students are farming, running small businesses and office employment. The majority appear to come from families with low- to middle-income levels. On the average, the students completed their previous education about three years before attending the Distance Education Project. Over 85 per cent of the students possess their own radio sets. Almost 80 per cent enter the programme without previous experience in learning at a distance.*

The utilization of multi-media in distance learning

Approximately 80 per cent of the students in the project prefer to use printed instructional materials, the other 20 per cent support the utilization of radio as a main medium of instruction (Chinnanon, utilization of radio as a main medium of instruction (Chinnanon, 1988). The majority of the students (79.5 per cent) study the printed materials before the broadcast of the related radio programme. Only 13.5 per cent study the printed materials and listen to the radio programmes simultaneously and the rest study the materials after the radio broadcast (Northeastern Regional Centre, 1984). On the average, the students spend almost two hours studying each printed instructional lesson (Chinnanon, 1988).

---

* Figures are from the Department of Non-Formal Education, 1987 and Chinnanon, 1988.

For radio broadcasts, over 10 per cent of the students indicated that they listened to almost all of the broadcast programmes for the enrolled courses. Approximately 65 per cent listened to some of the programmes and over 20 per cent never listened to the programmes at all. Concerning the programme formats, 30 per cent of the students preferred straight lecture, 25 per cent preferred the interview and question-answer format, 13 per cent preferred documentaries, 10 per cent preferred dramatization and the rest preferred other formats (Department of Non-Formal Education, 1987).

Approximately 30 per cent of the students utilized the cassette tapes at the community learning centres. Similarly, about 30 per cent duplicated the cassette tapes for their own use (Department of Non-Formal Education, 1987).

The costs and impact of the Distance Education Project

An analysis of the costs of the Distance Education Project reveals that the average operating cost per head for government spending is Baht 1,194, which is divided into Baht 119 in capital costs per head and Baht 1,075 in recurrent costs per head (Dechrapeepong, 1985). Comparatively, the cost per person for the Distance Education Project is much lower than the average operating cost per individual for government spending on regular formal secondary school, which is about Baht 4,087 or Baht 1,140.75 in capital costs and Baht 2,946.37 in recurrent costs (Niransirot and Chiamboonsri, 1984).

The summarized evaluation of the Office of the National Education Commission on the Educational Radio Project (Fry, 1985) reveals that the perceived impact of the radio programmes on the listeners of the Distance Education Project include: improved ability in writing, speaking and understanding the Thai language; improved etiquette in conversation and communication; application of knowledge received to increased occupational skills; application of new ideas and knowledge to improved daily living; increased self-confidence and greater courage in expressing ideas and using new ideas to help the community.

ideas and knowledge to improved daily living, increased self-confidence and greater courage in expressing ideas and using new ideas to help the community.

The study also indicates positive correlations between the service ratio of the project and indicators of educational disadvantage for individuals and the community. Another impact of the project has to do with cost savings. The study reveals that almost 200 million Baht is saved per annum (Fry, 1985), which is generated from the large number of distance students who do not forego the normal economic opportunity costs associated with formal schooling. The final cost saving related to the Distance Education Project is the avoidance of costly construction for additional secondary school infrastructures throughout the country.

Future Plans for the Distance Education Project

As a result of rapidly increasing enrolment in the project, future objectives are aimed at securing both the quantitative and qualitative aspects of the project. Attempts are being made to modify the current operation and open the distance education system to the entire population. This may ensure equal access to educational opportunities and lifelong education. Future plans for the project include:

1. ***The utilization of television and video cassettes in the Distance Education Project.*** In 1988, the Government of Thailand established a new educational television network (Channel 11) to broadcast educational programmes of various institutions, including the Ministry of Education, Ramkhamhaeng University, Sukhothia Thammathirat Open University and other organizations. The Centre for Educational Technology under the Department of Non-Formal Education is in charge of producing television programmes for the Ministry of Education. Television broadcasts are expected to be incorporated as an additional instructional

medium for the Distance Education Project. Besides television, the number of personal video cassette players in Thailand has increased rapidly in the last few years. Video cassettes will be used to support distance education programmes;

2. ***The development of community learning centres.*** To strengthen the provincial support system for the Distance Education Project, the number of local learning centres and village reading centres will be increased to accommodate the various instructional materials, including books, self-instructional texts, study guides and other printed materials and audio and video cassette players. The centres are open to all students and villagers, who may learn at their own convenience. Furthermore, the centres are also used for the weekly group meetings of students in the Distance Education Project;
3. ***The creation of course transferability.*** Different continuing education programmes are being offered by the Department of Non-Formal Education, including evening classrooms for adults and a testing and certification programme. To make the Distance Education Project an open learning system, course transferability is being designed to link the project to Thailand's other continuing education programmes. The goal is to create an interchangeable continuing education programme. This plan will allow the students in the project to take courses from the other continuing education programmes as part of their own study curriculum. Similarly, the Distance Education Project admits students from the other programmes, who may take courses through distance teaching and transfer them to their original study programme;
4. ***The development of distance education programmes for specific groups.*** To promote the equality of educational opportunities, the future development of the Distance Education Project will be extended to specific groups of the educationally disadvantaged population. A special distance education programme is being offered, on an experimental basis, to local leaders in the northeastern region who lack basic education. In the northern region, a large number of

hill-tribe people have completed their primary education through the Hill Area Education Project. As no continuing education programme is offered in the hill-tribe areas, the Distance Education Project can extend its services to the scattered hill-tribes. Other project developments for specific groups include: education for women, education for the elderly, education in prisons and education for disabled people.

Conclusion

The multi-media Distance Education Project of the Department of Non-Formal Education in Thailand has developed an innovative educational system to provide open access to continuing and life-long education for Thailand's population. The Thai experience illustrates that the open distance education system has the capacity to ensure equal educational opportunities and upgrade the educational standards of disadvantaged groups. Additionally, it is evident that with limited resources, the system can respond effectively to the increasing demand for education without costly construction requirements. Using integrated communication technologies for self-instruction, the distance education system can overcome geographical obstacles and employment conditions. However, continuous development of distance education is still needed to promote flexibility, adaptability, autonomy in learning and open access to life-long education for all population groups.

References

Fry, Gerald. ***Summative evaluation of the Radio Education Project;*** report. Bangkok, Office of the National Education Commission, 1985.

Nongluck Dechrapeepong. ***An analysis of costs in the Radio Correspondence Programme of level III and IV functional adult education in the Northern Region.*** Bangkok, Srinakarinwirot University, 1985. (Unpublished master's thesis).

Sanong Chinnanon. ***Multi-media distance education: factors affecting the educational achievement of adult participants in the Radio Correspondence Project in Thailand;*** paper presented at the 14th International Council for Distance Education World Conference, Oslo, Norway, August 1988. Bangkok, 1988.

Takol Niransirot; Permsak Chiamboonsri. "Operational costs in secondary education". ***Journal of National Education,*** 18 (3), February – March 1984.

Thailand. Ministry of Education. Department of Non-Formal Education. ***Report of the National Survey on Instructional Media of the Distance Education Project.*** Bangkok, 1987.

________. ________. ________. ***Report of the operations division on the implementation of non-formal education activities.*** Bangkok, 1987.

Thailand. Northeastern Regional Non-Formal Education Centre. ***An analysis of the operations of the Radio Correspondence Project.*** [Chiangmai], 1984.

Bulletin of the Unesco Principal
Regional Office for Asia and the Pacific
Number 29, 1988

DEVELOPMENT AND REFORM IN TEACHER EDUCATION

At the threshold of the last decade of the twentieth century, economic, social and cultural changes are accelerating exponentially. These changes are often linked to the continuous process of scientific and technological development. Education in many countries is responding to these changes, incorporating educational developments and reforms such as those discussed in the previous section of this Bulletin.

Reform in teacher education constitutes part of the reform movement in education.[1] The teacher education reforms described in this paper were drawn from a survey on teacher education of the member countries participating in the Asia and Pacific Programme of Educational Innovation for Development (APEID). Thirteen of these countries replied to the survey questionnaire: Australia, China, India, Japan, Republic of Korea, Malaysia, Maldives, Nepal, New Zealand, Pakistan, Philippines, Sri Lanka and Thailand.

The survey questionnaire did not ask for reforms ***per se***, instead it solicited descriptions of innovations and developments in teacher education.[2] Because the survey was made in 1985-1986, it is assumed that many of the innovations and developments that are described have now permeated teacher education in the respondent countries and, therefore, have become ***reforms*** in teacher education.

Developments and reforms in teacher education will be discussed under the survey's major themes:

---

1. Reform in this paper refers to planned changes brought into widespread use for the improvement of teacher education.

2. Innovation in this paper refers to an idea or practice that is new to education, and in this paper the word is specific to teacher education.

a) Pre-service education;
b) Teacher recruitment;
c) Teacher induction;
d) In-service teacher education;
e) Policy and structural changes in teacher education;
f) System linkage of teacher education institutions;
g) Research on teacher education.

Pre-service Teacher Education

Most countries in the region have recognized the importance of pre-service education for teachers. Many have realized that an education system can only be as good as its teachers. India's 1986 National Policy on Education states that "no people can rise above the level of their teachers".

In any attempt to improve teacher training, priority is given to pre-service education. There are a number of developments in this area, the major ones are described briefly.

School-based teacher education. In a few countries, one of the leading reforms in pre-service education is the attempt to make such education school-based. Previously, most pre-service teacher training was done only in universities' colleges of education and teacher training colleges. Now, prospective teachers are given on-site exposure to the realities of teaching in their nations' schools. For example, in Maldives, students of the Institute of Education return to their home island for a period of four weeks. During this time, these prospective teachers examine their island school situations using a research survey instrument. On their return to the Institute, the data they gathered is used in relevant academic courses. Such experience also provides a way to translate theory into practice. In the Philippines, observation and practice teaching are no longer done only in the laboratory schools of the colleges of education of the universities and in teaching training colleges. Student teachers are now being assigned to public schools, including those in the slum areas and remote villages.

Practicum-based teacher education. Related to school-based teacher education, practicum-based teacher education is offered in one state university in the Philippines. The curriculum involves a structured programme where the student learns to be an effective teacher by actually being involved with pupils and the community, and theory and practice are integrated at the earliest stage of the student's experiences. The student is encouraged to become a successful beginning teacher through simple, appropriate classroom and community apprenticeship activities.

In Thailand, prospective teachers in teacher training colleges are required to carry out some of their fieldwork at the Centre for Clinical Applications and Practices. In addition, student teachers in the four-year teachers' college programme gain additional practical experience by doing their practicum twice: the first time in the second or third year (for six weeks) and the second time in the fourth year (for 16 weeks). After the first practicum, the students, practicum supervisors and members from the faculty of education discuss and endeavour to solve any problems that may have arisen during the students' initial exposure to classroom teaching.

Ladder-type curriculum. In the Philippines, some teacher-training colleges have tried a ladder-type curriculum. This provides a sequence of courses so that a student, who leaves school after the first or any year before completing the four-year course, may still be certified for certain positions: after finishing the first year, as a Teacher Aide; after the second year, as a Teacher Assistant; after the third year, as a Teacher Associate. The full teaching degree is granted after completion of the fourth year.

Teacher training outpost. In New Zealand, a general shortage of secondary teachers in the early 1980s led to the establishment of several school-based secondary training outposts. These are located in areas with significant numbers of suitably qualified candidates and teacher shortages. The outposts are under the control of and are closely associated with the nearest teacher's college, and rely heavily on senior teachers from participating schools for tutorial support and classroom teaching.

In some provinces of Pakistan, teacher training units have been added to existing high schools with a skeleton training staff provided for the units. Selected teachers at the high schools are also used as teacher educators. Through this arrangement, the supply of trained teachers has been accelerated.

In Sri Lanka, because of the growing demand for teachers in the plantation districts, young people from these areas are recruited from and receive their teacher training in the districts themselves.

Teacher Recruitment

In many countries, there is a feeling that the better qualified young people are avoiding the teaching profession, which has adversely affected the status of teachers. Innovations and reforms have been instituted to remedy this situation. Some of these are briefly discussed below.

Minimum academic standard. In Australia, Japan, the Republic of Korea and the Philippines, a minimum academic standard has been established for entry into teacher training colleges. For example, in Japan, applicants for teacher training institutions are interviewed and tested for mental ability and aptitude.

Scholarship. In China, particularly in the remote areas, community leaders offer grants to promising young people to attend teacher training colleges on the condition that they return and teach in their village.

In some countries (e.g., Malaysia, Philippines), there are fewer and fewer male applicants for the teaching profession. More scholarships are, therefore, being offered to prospective male teachers. In other countries, however, (e.g., South Asia) the problem is how to train more young women to become teachers. In these countries, scholarships for prospective women teachers have been made available. In such countries as Nepal, Bangladesh and Pakistan, women teachers are an important determinant for the enrolment of girls in primary schools. In Nepal, a project entitled "Equal Access of Women to Education (EAWE)" has been launched to train young women as primary school teachers. After their training, these young women return to their home areas to teach in the village schools and, thus, promote a more positive attitude to the education of females.

In New Zealand, in view of the country's cultural diversity, special efforts are being made to recruit into teaching a mix of candidates that reflects the profile of the New Zealand population. For instance, target quotas have already been set for Maori and Pacific Island candidates.

Teacher Induction

Plunging teachers into the classroom without proper induction has been found to be generally counter-productive and in some cases, has proven to be quite traumatic for newly certified teachers. Therefore, efforts have been made to provide a more systematic teacher induction process.

In Australia, the school principal is responsible for the induction of teachers during their first year of teaching, while they are on probation. In countries like Sri Lanka and Japan, intensive seminars are organized for new teachers. In Japan particularly, a research study was done at Tsukuba University to help develop an effective in-service programme for beginning teachers. In Maldives, there is no systematic induction programme. However, beginning teachers obtain much help from fellow teachers and supervisors and weekly staff meetings have been found to be quite useful.

In-service Teacher Education

In all of the respondent countries, teacher education and development are emphasized as processes that extend throughout an individual's career. Some of the developments in the area of in-service teacher education are briefly discussed here and in the section on structural changes.

Staff development. A major reform in in-service education has been in the context of systematic staff development. For instance, in Tasmania, Australia, a senior staff development scheme has been developed in which senior teachers are given a week at a time, three times a year to undertake specifically designed courses in such areas as curriculum development, evaluation and administration.

In China, the competency of secondary school teachers is being upgraded by sending groups of instructors for in-service training at the various provincial pedagogical institutes. Priority is given to teachers who are ill-prepared for their profession because of the cultural revolution.

The National Educational Policy of Pakistan envisages in-service training for each teacher at least once every five years.

Distance Education

In-service teacher training *via* distance education has also been a major development in many countries in the region. Institutes of education in open universities have assumed a pivotal role in upgrading teacher quality in China, Pakistan, Sri Lanka and in the South Pacific.

New communication technologies are being used in the distance education of teachers. Satellite communications have proven effective in India and the South Pacific, while in Nepal and Maldives radio is used extensively for the in-service training of teachers.

School-based in-service education. In many countries, the in-service education of teachers is school-based. Japan's In-service Education for Teachers (INSET) is a very good example. An interesting feature of the INSET programme is that the teachers themselves plan and organize their in-service education activities.

In Malaysia, the school headmaster/mistress assumes a professional leadership role in the in-service training of teachers. Sri Lanka has about 60 education officers and 1,000 master teachers, who implement the nation's school-based in-service education programme.

To broaden the scope of teacher education, Thailand has recently instituted a ***community-based*** programme for in-service teacher education, which offers classes in the evening and on weekends at on-campus locations and at the extension centres of teacher training colleges.

Policy and Structural Changes in Teacher Education

In many countries of the region, innovations, developments and changes have occurred, many of which have implications for policy and structural changes in teacher education.

Linkage to socio-economic reforms. China's political, economic and educational leaders have recognized that without effective teacher education, the successful realization of the country's four modernizations policy will not come to fruition. Teacher education is regarded as a strategic measure in China's social, economic and cultural reconstruction and, therefore, is given high priority in: the distribution of finances, personnel and facilities; arrangements for capital construction; the recruitment of teaching staff; and the admission of excellent candidates.

Leave with pay. To meet the demand for teachers and other educational personnel in specialized areas in New Zealand, teachers are granted leave with full salary if they are pursuing post-graduate training in teaching the handicapped, teacher librarianship, guidance counselling or reading recovery.

Teacher certification. In Japan, more flexibility has been introduced into the teacher certification system to enable it to cope with the diversification of upper secondary school education and to attract competent people into teaching, especially with reference to vocational and practical subjects.

In Malaysia, in view of the shortage of teachers in school subjects that require special talents such as music, the appointment of itinerant teachers who service a cluster of schools has become an accepted practice, particularly in the rural areas.

Professionalization of teaching. In the Philippines, attempts are being made to upgrade the teaching profession and to bring it on par with other professions. One way to do this is to resolve issues and problems pertaining to teacher education in consultation and/or in collaboration with professional organizations and institutions. For instance, the curriculum on teacher education was prepared by the Ministry of Education, Culture and Sports (MECS) in collaboration with the Philippine Association of Teacher Education (PAFTE). PAFTE developed prototype syllabi and locally authored textbooks for the new courses in the new curricula. "Policies and standards for teacher education", passed in the 1983 MECS Order No. 26 and revised as MECS Order No. 37 in 1986, was formulated through a series of consultative conferences, particularly with PAFTE. The Association of Philippine Colleges of Arts and Sciences (APCAS) was consulted for changes in the general education and specialization components of the MECS orders. Research grants for teacher education have been extended to professional organizations by the Ministry, while joint conferences/assemblies between MECS and non-governmental agencies have been conducted to discuss issues and problems in teacher education. The orientation/retraining of private school teachers from elementary schools was conducted as a joint project of MECS, the Fund of Assistance to Private Education (FAPE) and PAFTE. It should also be pointed out that in the Philippines, the teacher examination is now given by the Professional Teachers Board of Examiners instead of the Bureau of Civil Service.

In New Zealand, 20 per cent of its teachers' college teaching positions are offered as short-term contracts to attract teachers and other specialists directly from the education sector. The prior positions of these personnel are protected during their contract period. This procedure ensures that the content of teacher education courses is consistent with current practices in the education field. In addition, New Zealand has established a number of 'teaching outposts' where students are given more school-based training. Research seems to support the view that these measures are providing effective initial teacher training in the one-year course for secondary teaching.

Structural Changes

Infrastructure for in-service education. In many countries, new infrastructures for in-service teacher education have been set up. In the Republic of Korea, a Korean National University of Education was established in 1985 to educate and re-educate teachers and take a leading and exemplary role in educational reforms.

Recently, India has instituted the District Institute of Education and Training (DIET), which is designed to improve and enrich the academic background of elementary school teachers, non-formal and adult education functionaries and other personnel at the lowest level of the education system. DIET is part of an attempt to decentralize professional preparation and extend excellence from the urban to the rural areas and from the elite to the general population of teachers.

In terms of the organizational structure of teacher education, the requirement for community responsiveness has led to moves towards decentralization in college and university organization and administration and towards curriculum planning and evaluation procedures in an attempt to foster greater sensitivity to local needs. As one example, special teacher education programmes in Sri Lanka have been implemented in special areas, notably Mahaveli (a large-scale development programme) and Plantation (an education subsystem, which remained for a long time outside the mainstream of education development in Sri Lanka).

On the other hand, in China the administration and management of teacher education has been placed under a newly established Teacher Education Department, which is part of the State Education Commission.

System Links and Cohesion and Ways of Organizing Teacher Education

Consistent with the view that the education of teachers must be seen as a continuing process, a number of countries have sought to develop links between their pre-service courses and in-service programmes. In this regard, India's 1986 National Policy on Education states that "teacher education is a continuous process, and its pre-service and in-service components are inseparable".

Pre-service cum in-service education. Maldives and Philippines have initiated new modalities for the in-service education of teachers, whereby teacher educators who go out to supervise pre-service teachers during their teaching practice also provide in-service education to teachers.

Flexibility in specialization. Rigidity in the specialization of teacher training has also been identified as a problem in a number of countries, and there have been some notable attempts to overcome this through the development of links between primary and secondary training. In this regard, Malaysia has included a 'primary education package' in the training of lower secondary school teachers to give them more flexibility in school development.

Cluster approach. The development of these links has also been adopted as a way of maximizing available resources for teacher education. Malaysia has looked into the sharing of personnel and physical facilities between colleges. In Thailand, the country's 36 teacher education institutions are grouped into eight clusters for the purpose of sharing resources. In addition, the higher education institutions engage in a system of sharing research, staff development and extension facilities. As a result, there is more efficient use of teacher education resources in the country. Likewise in Thailand, schools have been clustered together to provide in-service training for their teachers. As a result, the programmes provided are more relevant to the needs of the teachers in participating schools.

In the past, teacher training institutions, particularly colleges of education associated with universities, seemed to operate in an ivory tower, remaining functionally unlinked to the schools. Teacher training then was very theoretical and rarely tied to practical methods. This absence of connection between theory and practice created many difficulties. For example, schools in Japan have often been reluctant to receive students for practice teaching sessions because the universities have not carefully considered the personal qualifications of the prospective student teachers. Thus, the availability of schools and classes for practice teaching has been severely limited. To rectify this shortage, Japanese educators have proposed that a network be established between the university, the local government (Board of Education) and the schools. The forging of such links has been successful in a number of countries.

Research in Teacher Education

Perhaps the least developed area is research in teacher education. Despite this fact, the topic has been included in this paper, if only to identify crucial themes for this area. Sporadic research has been done in some cases, although the research designs and methodologies leave much to be desired.

In the survey of teacher education, which drew completed responses from 13 countries, the following areas for research were mentioned:

1. **Longtitudinal studies** that make a determination of how selection, training and placement variables moderate each other and how they may be linked to teacher success;
2. **Selection studies,** which determine the motivational basis for choosing teaching as a career and whether an early decision to take up teaching affects teaching success;
3. **Training studies** that identify training procedures indigenous to a given culture and how these are affected by the use of modern communication technologies;
4. **Placement studies** that look into the ways by which beginning teachers are socialized, the effects of different types of supervision on these teachers, the influence of teachers' immediate peers, the influence of pupil behaviour on teacher behaviour, and the effects of the social environment on a teacher's behaviour;
5. **Effectiveness studies** to establish those individual behaviours that should be developed in future teachers to improve their competence;

6. **Teacher attributes studies** that identify the relationship between teacher attributes/qualities/skills and student behaviour;
7. **Impact studies** that include studies to assess the effect of modern communication technologies on teacher effectiveness and on the students' learning process and achievements;
8. **Child development/cognitive development** studies that have implications for teacher education.

Summary

Many of the developments in teacher education that are discussed in this paper have yet to be translated into reforms. The initiatives and innovations aimed at strengthening education also remain somewhat disjointed in many countries. It is hoped that this paper has given a holistic perspective of developments in teacher education, which may be considered as comprehensive reforms in teacher education which are sought by member countries of the region.

Bulletin of the Unesco Principal
Regional Office for Asia and the Pacific
Number 29, 1988

REFORM IN SECONDARY EDUCATION IN PAKISTAN

Introduction

The Islamic Republic of Pakistan came into existence on 14 August 1947. With a total area of 796,095 square kilometres, the country is divided into the Federal territory and four provinces: Punjab, Sind, the North West Frontier Province (NWFP) and Baluchistan, which act as administrative units.

At present, Pakistan has a population of about 100 million with an annual population growth rate of 2.9 per cent. The population is unevenly distributed among the various provinces. Accordingly, Punjab is the biggest province with about 56 per cent of the country's population. In terms of area, Baluchistan is the largest province (encompassing 43.6 per cent of the country), but it has only 5.1 per cent of the country's population.

In the past, education in Pakistan was a provincial concern. Today, it is the joint responsibility of the provincial and federal governments. According to the national constitution, a number of important matters in education are now on the concurrent legislative list. Specifically, these relate to educational policy, planning, curriculum and textbooks, standards of education and Islamic education. Responsibility for the libraries, museums and other institutions financed by the Federation is vested with the Federal Government.

The Federal Ministry of Education is headed by the Minister for Education, who is assisted by a senior civil servant as Education Secretary. The Ministry is divided into different wings, which are directed by joint educational advisers. According to their specific assignments, the wings are sub-divided into different sectors and sections with Deputy Educational Advisers or Assistant Educational

---

This article has been prepared on the basis of "An Appraisal Study on Reorientation and Reform of Secondary Education in Pakistan", conducted by the Curriculum Bureau, Ministry of Education, Government of Pakistan in April 1988.

Advisers/Education Officers as their officers-in-charge. The provincial education departments are headed by the Provincial Education Ministers, who are assisted by senior civil servants with the title of Provincial Education Secretary. Each province is divided into regions or divisions for administrative purposes. Each region or division is further divided into districts, which are administered by a District Education Officer. Male and female District Education Officers supervise the operation of the boys' and girls' schools, respectively. To effectively control and supervise each educational institution, the districts are further divided into sub-divisions and tehsils, with officers-in-charge who are called Sub-Divisional Education Officers (SDEO) and Assistant Divisional Education Officers (ADEO), respectively.

Parallel to the administrative structure, independent advisory bodies called Education Councils work at the national, provincial, district and community levels. These councils are composed of elected representatives of the people, outstanding educationists and scholars, parent representatives and other community organizations. The councils oversee and evaluate the implementation of the national education policy and suggest ways and means for educational development in the areas under their jurisdiction.

Education Policy and Programmes

In the present educational structure, secondary education plays a crucial role. It is both the terminal stage for the majority of students and a significant determinant of quality in higher and professional education. The present four-tier system of education, that is, primary, secondary, college and university, will gradually be replaced by a three-tier system comprising elementary, secondary and university levels. Classes IX and X will be added in all intermediate colleges, while classes XI and XII will be added in selected high schools. Physical facilities such as science laboratories, teaching and audio-visual aids and hostels will be provided for secondary schools, particularly in Mufassil areas, to bring them into parity with the facilities available in urban institutions.

A wide range of curriculum offerings will be introduced at the secondary stage to encourage greater individual diversification according to the aptitude of each student. Horizontal movement between the general education and the technical education curriculums will be facilitated.

Mathematics will be introduced as a compulsory subject for all science students in classes IX through XII and for arts students. The group terms 'medical' and 'non-medical' will be abolished, which will give students more options for higher and professional education offerings and will also improve educational quality.

The present scheme for agro-technical subjects will be reviewed and necessary changes will be made in light of past experiences to make the courses more relevant. Agro-technical subjects will also be introduced in all schools gradually.

Enrolment at Secondary Level

Overall enrolment at the lower secondary and secondary levels increased considerably from 1982 to 1983 and from 1985 to 1986. Due to socio-cultural constraints primarily in the rural areas, the enrolment and retention rates for females have remained static. However, in urban areas the number and educational levels of females have seen satisfactory increases. For male students, the situation in rural as well as urban areas is improving gradually.

The 1985 to 1986 enrolment, completion and transition rates at the different stages of secondary education were:

a) **Lower secondary stage (classes VI-VIII)**

Enrolment : 19,770,000
Enrolment rate : 22.7 per cent
Completion rate : 72.89 per cent
Transition to secondary stage : 74.99 per cent

b) **Secondary stage (classes IX-X)**

Enrolment : 1,113,874 (including 55,000 in vocational programmes)
Enrolment rate : 20.2 per cent
Completion rate : 47.86 per cent
Transition to higher secondary stage : 55.25 per cent

c) **Higher secondary stage (classes XI-XII)**

Enrolment : 291,130
Enrolment rate : 8.9 per cent
Completion rate : 30.32 per cent

Problems in Secondary Education

At the time of its independence in 1947, Pakistan inherited the British colonial system of education. It had only two universities, 40 colleges, 408 high schools and 10,603 middle and primary schools with an enrolment of 644 university students, 13,300 college students, 50,000 high school students and 980,000 children in primary and middle schools.

The structure of the educational system needed a drastic change. Hence, the first All Pakistan Educational Conference was convened to begin overhauling the entire system. Over the past four decades, expansion has occurred in the number of institutions and increased enrolments. However, this growth has created a new set of problems in the sphere of education. With the passage of time, some piecemeal changes have been made, but the complete change-over to a system that will meet the educational needs of Pakistani society has yet to be made fully operational. The cure-all for the current problems facing Pakistan's education system remains undiscovered, yet during the time of the Sixth Five-Year Plan (1978-1983) strong programmes were drafted that would take care of the educational needs of Pakistan society. To give substance to these programmes and to the present plan, reforms and innovations are being explored and implemented experimentally.

In the following paragraphs a brief description is given of the major issues, their related problems and the reforms and innovative strategies that are being implemented.

Curriculum and textbooks

The curriculum is a subject that has been widely discussed. Its weaknesses are often pointed out in the different media, which say it is imbalanced and overloaded with irrelevant concepts.

Textbooks are considered by the public at large to be the sole representatives of the educational curricula, which is not actually the case. Despite the best efforts of the government to produce model textbooks, certain inconsistencies have crept into the textual material because the models are experimental editions that are likely to be imperfect. One of the purposes of experimentation is to improve the curricula and the textbooks that are in use. The participatory approach adopted for reviewing and revising textbooks at the manuscript stage has enhanced the efficiency and quality of the work of participating agencies.

Improvements in textbook and curriculum development have also been hampered by the amount of public attention and media criticism directed at the experimental methods. If the problems being faced had been dispassionately tackled initially, much more progress would have been made. To ensure the success of planned and ongoing reforms at the secondary education level, immediate remedial measures will have to be undertaken to address the following issues/problems:

a) The entire educational curriculum has been publicly criticized;

b) Language used in the classrooms for the transfer of knowledge to the public has also been criticized;

c) Terminologies used in the textbooks are being questioned widely;

d) The mathematics and science curricula have invited public criticism through the press;

e) The place of religious education/moral education was determined and these subjects were made compulsory in the scheme of studies. Criticism still persists as to the content of these courses;

f) The allocation of time to foreign languages in the time table leaves very little time for the teacher to accomplish much;

g) Teachers consider the curriculum to be too heavy;

h) Textbooks are not available in time for the beginning of the school session;

i) Competition among writers and publishers of textbooks is non-existent;

j) Experimentation on the curriculum at every level is too limited;

k) The curricula of general secondary schools and vocational schools offer limited pre-employment training for secondary school-leavers.

Heavy core

To inculcate in the students patriotism, national cohesion and better citizenship, some additional study areas have been introduced as core subjects into the general curriculum. These include the history of Pakistan and Islamiyat, which are compulsory subjects at the secondary level. Similarly, several languages (Arabic, English, Urdu/regional language) have been included in the scheme of studies at the lower secondary level. This heavy core curriculum has given rise to such problems as:

a) Increasing the students' workload;

b) Having students who prepare only selective topics in a subject for the single purpose of achieving better examination scores;

c) Reducing the emphasis on elective subjects in terms of school time and depth of curricula, causing a lowering of standards;

d) Disturbing the relationship between horizontal and vertical linkages in subjects at various levels and in different fields of study.

Teaching aids

Pakistan's teachers lack the required skills for the development and proper use of teaching aids. It is imperative to look into the variety of problems connected with teaching aids and teaching methodologies and to equip teachers with the skills they need to handle classroom problems effectively.

The innovations that have already been adopted should be examined to see whether they can take care of the following problems:

a) Teachers are reluctant to use teaching aids in the classroom beyond the prescribed textbooks;

b) They lack the skills to make their own teaching aids;

c) Teachers are not utilizing their students' potential in the preparation of teaching aids;

d) They do not know much about the inexpensive raw materials that can be used in the preparation of teaching aids;

e) They lack information about the modern teaching aids that are available to them in their schools;

f) Schools have limited or no funds to replace unservicable or worn-out teaching aids;

g) Teachers lack adequate training in the use of new technology and educational aids.

Examinations

Assessment is a major aspect of education that has received the particular attention of policymakers, planners, administrators, teacher trainers and teachers. There has been an effort to renovate the examination system with a view to making assessment a continuous activity, so that the promotion of pupils from one class to the next can be made on the basis of cumulative achievement spread over the academic year.

Despite continuing attempts to improve the examination system in the past few years, the Boards of Examination have introduced only a few positive changes including moderation in the marking of test scripts, computerization of results, re-checking the answer-books of examinees who are not satisfied with the marking of their examination papers. To assess the effects of ongoing innovations and predict the reaction to future changes, an effort has been made to identify and enumerate the real problems concerning the system of assessment and examination. The following areas have been identified:

a) Assessment of pupils throughout the country is not uniform;

b) Continuous assessment is not being practiced;

c) Annual examinations are over-emphasized;

d) Teachers are not adequately trained in assessment techniques and procedures;

e) Examinations consume a lot of energy, time and money;

f) Examination questions are not standardized;

g) Use of unfair means is frequently reported;

h) Paper and pencil tests are used for both internal and external examinations with the exception of a few practical subjects;

i) External examinations at the end of the middle and high school stages are conducted respectively by the examination sections of the Education Departments and the Boards of Intermediate and Secondary Education. Cumulative assessment does not form part of the overall evaluation of the student;

j) Selected topics and chapters of textbooks are emphasized in the examination questions. The examinations do not encompass entire courses;

k) Examinations test only rote-memorization skills;

l) Too much time is spent on conducting the examinations, marking the scripts and compiling the results;

m) Honest teachers are reluctant to administer external examinations;

n) Preparation guides for passing the examinations are sold in the open market. Further learning is examination-oriented;

o) Certificates issued by the Boards do not indicate student behaviour in the classroom.

Administration and supervision

Teachers need guidance in the performance of their day-to-day classroom functions. With the expansion of educational facilities and increasing enrolment at the secondary stage, teachers' competencies need to be developed adequately to deal with the prevailing conditions. Changes in curricula and the demand for an improved educational standard require that educational administrators and supervisors update their knowledge and techniques in providing instructional guidance and improving institutional standards.

The problems that have been identified in administration and supervision include:

a) Overcrowding in urban schools due to natural increases in the population and parental preferences for particular or prestigious schools;

- b) Urban area town committees lack the funds needed to open new schools;
- c) High schools in large villages attract pupils from small villages, thus the high schools provided for the small villages operate below their enrolment capacity;
- d) The educational facilities of some schools in urban areas remain under-utilized because:
  - i) School locations are not suitable;
  - ii) Achievements of some schools are so poor that they do not attract students from their own area;
  - iii) In urban areas where there are too many schools, people choose the school that offers special advantages;
  - iv) Economically poor parents cannot afford to send their children to any school, even one that is run in their own neighbourhood;
- e) Schools are not adequately equipped with materials, apparatus, equipment or books because:
  - i) A needs assessment has not been made;
  - ii) Insufficient funds are available for new purchases to replace broken or out-dated equipment;
  - iii) Purchase procedures are complicated;
- f) Good teachers are not rewarded adequately;
- g) Administrators and supervisors do not take the time to visit schools nor do they have an interest in improving the schools and staff;
- h) School inspections are infrequent; moreover, they are usually ineffective.

Management of education

According to the Constitution of Pakistan, education is the joint responsibility of the Federal and provincial governments. The Federal Government is responsible for policy, planning, curricula, textbooks, standards of education, Islamic education, management of federal institutions and foreign training. The provincial governments are responsible for the management of provincial schools. Such divisions create tension and conflict between Federal and provincial educational administrators. The problems arising from these tensions/conflicts include:

a) Implementation of plans/policies is sometimes delayed;

b) Short falls in the achievement of targets generally occur as a result of differences in priorities;

c) There is a tendency to evade/transfer responsibility on sensitive issues by some federal/provincial officials.

Teacher training

Under current conditions, there is a shortage of teachers who can cater to the general educational needs of the rising student enrolment. In particular, there are not enough teachers for the areas of science, physics, chemistry, mathematics and biology.

These shortages, coupled with the inadequate number of teacher training institutions, further aggravate the already declining quality of the teacher population. As a result, the quality of the nation's high school graduates is bound to deteriorate because they are being inadequately prepared by their training institutions.

In-service training is not compulsory for teachers. As a result, changes in curricula or textbooks are begrudged by those working teachers whose knowledge and methodologies have become outmoded. Such attitudes fail to bring about healthy changes in the education of students at all levels.

Problems in the areas of in-service and pre-service training are numerous:

a) Colleges of education are not staffed by trained personnel. Most of the teacher trainers are themselves untrained; they cannot be expected to train pre-service trainees adequately in the art of teaching;

b) A large number of Pakistan's trained graduate teachers are the products of the above-mentioned colleges of education and, thus, lack adequate knowledge and practice to educate their pupils;

c) Relevant changes in the pre- and in-service teacher training curricula, which correspond to the existing secondary school curricula, have not been effected nor have textbooks for teacher trainees been recast to meet present needs;

d) The capacity of training colleges is currently under-utilized, the equipment and materials available therein are inadequate and the teachers and supporting staff of these colleges are often incompetent;

e) Entry qualifications and the duration of pre-service training programmes are inadequate and need to be enhanced.

Planning, development and financing of education

Until recently, Pakistan has spent a very small percentage of its GNP on education. In 1984-1985, more emphasis was given to educational spending, particularly at the secondary level. However, there are still many underprivileged and deprived areas that do not have any high schools and whose children have to travel long distances to reach their schools, which are located in the neighbourhoods of suburban and urban areas.

Information about the following problems, which are connected with planning, development and financing, is particularly inadequate:

a) Assessment surveys have not been done in many areas;
b) Prioritization must be made in light of available resources;
c) Data collection is cumbersome and the data base is poor;
d) Special-interest groups disturb the situation;
e) The competency of planners is questionable;
f) Involvement of implementing agencies is insufficient;
g) Training of planners and implementors must be carried out;
h) Resource constraints need to be analyzed;
i) Proper utilization of funds should be encouraged;
j) Procedures to release funds need to be established;
k) The progress of changes should be monitored;
l) Modifications must be permitted during implementation;
m) Plans should be reviewed and revised when necessary;
n) Evaluation of projects needs to be ongoing.

Inadequate school facilities

The existing participation rate at the secondary level is only 20.2 per cent, but the demand for secondary education will increase as the participation rate improves at the lower secondary level. This will generate other problems:

a) Greater financial allocations for secondary education will be needed;

b) Because secondary education is a terminal stage for many students, a larger labour force will be entering the job market. To absorb these people into the economy, diversification/new areas of training shall have to be explored;

c) The pressure on tertiary education will increase.

Reforms/Innovations in Secondary Education

Educationists are emphasizing change in the prevailing educational theory and practices. However, because behavioural change is a function of the interaction between an individual and his or her environment, goals must be set to achieve the desired changes in behaviour, particularly in those teachers who work as the agents of change.

To bring about behavioural changes in a society, the institutions of family, school and religion play very significant roles. The schools as part of the formal system of education are expected to cater to individual student needs within the framework of national requirements. When social pressures and a changing environment require that the essential elements or ingredients of education be updated, such changes must be transmitted to the next generation through the formal system of education. In doing so, national authorities and related agencies must give serious thought to the emergent problems at the national level and propose suitable reforms.

In Pakistan, secondary education receives due consideration at the national level whenever National Commissions are appointed by the government. But, the recommendations of these Commissions have never been fully implemented due to financial constraints and a lack of support from the field staff. In addition, most of the recommendations made by such Commissions and National Committees with respect to secondary education have been of an innovative rather than simply corrective nature.

In the context of education, an innovation is a concrete or abstract novelty that is aimed at introducing reforms into the structure, organization, management or supervisory area or into the teaching/learning environment.

Suggested reforms in education to improve secondary education have been initiated by establishing institutes of education in the provinces. The importance of these institutes in the reform programme is evident from their overall objectives, which are outlined below to:

a) Prepare candidates for the Bachelor of Education (B. Ed.) and Master of Education (M. Ed.) degree;

b) Promote facilities for training, study and research in education;

c) Organize in-service training for professional educators;

d) Conduct education research;

e) Provide guidance and advisory services to other educational institutions/organizations.

Another critical reform has been the establishment of a National Educational Equipment Centre at Lahore with the objectives of introducing new designs in science equipment, providing quality control and price standardization services for educational equipment, developing accurate equipment lists in accordance with the teaching syllabus, and training teachers to maintain science equipment.

General Examination Boards and Boards of Technical Education have also been established to conduct the examinations for the certificate and diploma courses offered by secondary, intermediate and technical education institutions, a burden which was previously handled by the universities.

The establishment of the National Bureau of Curricula and Textbooks in 1972-1973 can also be considered a reform in the area of curriculum development. Related to this national organization are provincial Bureaux of Curriculum and Textbook Boards.

Whereas the above organizations emphasize formal approaches and strategies, the Allama Iqbal Open University was established in 1974 to organize programmes based on non-formal approaches such as the use of audio cassettes, T.V., radio and correspondence courses. Its curriculum is designed to meet the learning needs of that part of the population which is outside the formal school system.

Reforms conceived at the federal level

Innovations in operation and those under consideration are included in this section. The innovative projects/activities undertaken at the provincial level as a follow-up to the federal programmes are generally in the areas of materials development and research and evaluation, and are planned and implemented to determine the degree of success of the reforms introduced at the secondary level. These projects are also expected to suggest ways and means to bring about improvements in the organization reforms and/or to design new reforms at this level of education.

Innovations conceived at the federal level for the improvement of secondary education

a) Establishment of a library in each Town Committee;

b) Incentives to teach science subjects, preparing advance contracts with prospective teachers and providing a system to maintain grants for first class B.Sc. or M.Sc. graduates until jobs are assured for them;

c) Upgrade of the largest middle school in a Union Council to high school status if there is no high school in the Union Council;

d) To ensure quality education at the secondary stage, development of audio teaching cassettes and textbooks by eminent teachers and experts;

e) Establishment of an English Language Institute for pre- and in-service teacher training and development of textbooks, tests, etc.;

f) Development and printing of teacher's guides as priced publications to improve classroom instruction;

g) Development and printing of test item pools as priced publications for objective evaluations;

h) Printing of model lesson units;

i) Preparation of teaching kits for middle-stage science classes;

j) Use of micro-computers for teaching;

k) Establishment of an Institute for the Promotion of Science Education and Training with a network of four regional centres.

l) Establishment of National Museums of Science and Technology to arouse interest among students and supplement the teaching of science in schools;

m) Introduction of vocational and agro-technical education in general education (classes VI-IX) in 4,843 schools;

n) Establishment of a National Technical Teachers' Training College in Islamabad;

o) Establishment of an agro-technical scheme of studies. This scheme is currently in operation in about 4,843 schools:

    1. Equipment worth Rs. 30.3 million has been supplied to selected schools;
    2. Six Agro-Technical Teacher Training Centres have been established at a cost Rs. 9.34 million to training agro-technical teachers;
    3. A middle technical scheme for education has been implemented in nine boys' and three girls' schools in Islamabad;
    4. Vocationalization and professionalization of general education has occurred under the scheme.

p) Establishment of a President's Talent Farming Scheme with a view to encouraging talented students in rural areas;

q) Creation of library facilities in secondary schools;

r) Introduction of economics and English classes in Deeni Madaris (religious schools) so that students may gain the knowledge needed to earn a respectivable living;

s) Creation of Centre for the Advancement of Talent to promote competitive spirit among students;

t) In-service training once in every five years with incentives for promotion. This programme is to be implemented with the collaboration of the provincial education departments;

u) Establishment of the Academy of Educational Planning and Management in Islamabad to give in-service training to educational administrators;

v) Enhancement of pay to attract better teachers;

w) Establishment of the National Education Council as a think tank organization;

x) Strengthening of APEID activities in Pakistan;

y) Organization of a summer school for talented science students;

z) Creation of mobile science units to promote science education in secondary schools;

aa) Plans by Allama Iqbal Open University to start a secondary stage education programme using their distance teaching methods;

bb) Award of cash prizes and certificates to schools and heads of institutions, whose student bodies improve their overall public examination scores;

cc) Production of model textbooks to serve as pace-setters for qualitative improvements.

Innovative projects undertaken by federal and provincial organizations

The Curriculum Research and Development Centre, Government of the Punjab, Lahore has begun work on the following projects:

a) An evaluation of the proposed biology curriculum at the intermediate level in Pakistan;

b) A comparative study of the effectiveness of inquiries and traditional methods for teaching biological sciences in laboratories at the high school level in the Lahore district;

c) A comparative study of the effectiveness of inquiries and traditional methods for teaching biological sciences in laboratories at the high school level in the Punjab;

d) Development of self-instructional enrichment materials in science subjects for intermediate classes from XI to XII;

e) Identification of strategies for the development of laboratory skills among science laboratory assistants and the development of instructional material and model tool kits for this purpose;

f) Development of an activity-based method to teach Pakistan studies in crowded classrooms at the secondary level;

g) Improvement of proficiency in Punjabi reading and writing for the middle and high school teachers of Punjab;

h) Developing and determining the effectiveness of learner centred packs for middle classes in social studies;

i) Preparation of a study of knowledge and attitude towards Pakistan among the teachers and students of class;

j) Establishment of standards for Pakistan studies;

k) Preparation of guidelines for the teaching of social studies in the schools of the Punjab;

l) Implementation of an agro-technical (industrial arts) curriculum for classes VI–VIII;

m) Development of teacher guides in the subjects of home economics for classes VI and VII;

n) Evaluation of an English language curriculum for secondary classes;

o) Evaluation of an English language teaching programme for classes VI–VIII.

The innovative projects introduced by the Bureau of Curriculum Development and Education Extension Services, NWFP, Abbottabad for the improvement of secondary education

According to the Education Policy 1972–1980, all curricula were revised and reviewed again under the National Education Policy 1978–1983 to ensure that adequate concepts of national ideology were reflected and the Islamic ideology is projected in all existing textbooks. Some new concepts were also included in the textbooks.

The nation's educators realize that the teacher is the pivot of the educational system. Therefore, a decision was made to upgrade the quality of education by providing in-service facilities to train teachers at least once every five years. This training programme may be supplemented with appropriate instructional material.

Because of the expansion that has taken place in education and the subsequent increasing needs of teachers at the secondary level, free guide books were prepared and distributed as resource materials among middle and high school teachers in the NWFP province through the District Education Offices and Sub-Divisional Education Offices. Free instructional materials on lesson plans, questioning techniques and micro-teaching were prepared and distributed to improve the professional quality of the province's teachers.

Objective questions have attained great importance in the present educational system to test student achievements. To improve the knowledge of teachers in the preparation and execution of such questions, objective tests in Urdu, Islamiyat, social studies, general science, mathematics and English for classes VI to VIII were prepared and distributed free-of-charge to every secondary and middle school in the province.

Senior English teachers have also been acquainted with methods of teaching using less-expensive materials. This training was actually all audio-visual aids training, which is offered as a regular course each year. Lessons were also video-taped and recast during refresher courses carried out to improve classroom instruction. Similarly, diversified courses are being offered to supervisors and teacher trainers to improve their knowledge and skills.

A science project has been established at Peshawar to equip teachers with the modern techniques of teaching science at the secondary stage.

The preparation of guidebooks for classes IX and X is underway. In addition, an evaluation study is being conducted with respect to the guidebooks to improve the curriculum material for class VI.

Projects by the Bureau of Curriculum Development and Education Extension Centre in Baluchistan Quetta

a) A study to assess the effectiveness of reorientation courses to remedy the current situation by providing professional and academic assistance to teachers on-the-spot;

b) Development of a low-cost teaching kit.

Major innovative projects undertaken by the Bureau of Curriculum and Extension Wing, Hyderabad Sind

a) A study to assess the effect and utility of in-service training programmes conducted for secondary school teachers of science, mathematics and the English language;

b) Development of a manual for low-cost teaching aids;

c) Development of a handbook on supervision;

d) Establishment of a research cell;

e) Assignment of individual projects to trainees during their in-service training programme.

Methods and procedures adopted by the Textbook Boards to improve the quality of textbooks

Science teaching allowance. To provide incentives to teachers of science and mathematics an allowance of Rs. 100 per month per teacher has been granted to teachers in the Punjab since 1983.

teachers in the Punjab since 1983;

Participation of working teachers in the development of curricula. The participation of working teachers in the development of curricula is being increased as much as possible. Working teachers are also being involved in the writing of textbooks and teacher's guides and in the development of other teaching materials. The Punjab Textbook Board invites manuscripts on an open competition basis from all working teachers who are interested and have the aptitude for writing textbooks and teacher's guides. The manuscripts received from the teachers are evaluated and selected for textbook publication. Any working teacher who desires to participate in this activity can do so.

Assessment of teacher's performance. The government has devised a standardized pro-forma to evaluate the work of teachers and to make comparisons in order to distinguish between good and average workers.

Provision of science and mathematics teachers. To meet the shortage of science and mathematics teachers at the secondary school level, the provincial governments have relaxed the rules for recruitment. According to these new rules, when trained science and mathematics teachers are not available, students holding a B.Sc. or M.Sc. degree with at least a second class can be recruited as untrained science and mathematics teachers. This has helped to meet the shortage of science and mathematics teachers.

Examinations. To improve the examination system, the Government of the Punjab has recently issued instructions to all the Boards of Intermediate and Secondary Education in the Province. According to these instructions, the conduct of the examinations will improve as will the marking of answer sheets. The checking and rechecking of the sheets will also be ensured as a right of every student.

This will also improve the standard/quality of students receiving the Secondary School Examination Certificate while minimizing the chances of achieving high marks unfairly.

Introduction of a second shift. An important step being taken to reduce overcrowding at the secondary school level is the introduction of a second shift in existing schools, particularly in urban areas. A second shift has been introduced on experimental basis in 15 schools of one urban area.

Provision of feeder schools. Where the physical facilities and staff for secondary schools are under-utilized and enrolment is insufficient, middle schools are being added as feeder schools by upgrading primary schools to the middle standard.

Merger of schools. Whenever possible, schools with low enrolments and under-utilized facilities may be merged. The school buildings vacated as a result of this exercise may be used for other educational purposes, including the establishment of vocational/technical schools or commercial colleges if there are none in the area.

Spatial planning of educational facilities. While planning new facilities, the targets are generally expressed in terms of overall requirements. This gives rise to disparities and an imbalanced distribution of facilities between the rural/urban and male/female populations. To overcome this problem, most of the school programmes have been linked to a spatial configuration, that is:

a) A girls' middle school in each Union Council (population of about 150,000);

b) A technical middle school in each tehsil (sub-district level);

c) A boys' high school in every Union Council;

d) A higher secondary school in each tehsil; and

e) A technical high school in each district.

Vocationalization and professionalization of secondary education. Secondary education is a terminal stage for a large number of students. Without saleable skills, the high school graduates face problems in finding jobs. Some vocational subjects, such as agriculture, industrial crafts and commercial subjects, have been included in the scheme of study at the secondary level. By learning skills, the students are prepared to set up their own businesses or seek and find useful employment in their skill areas;

Introduction of B.S. education. At present, the prescribed qualifications for a secondary school teacher include a graduate degree with about nine months of training in a teacher training institution. The system does not attract the best science graduates because they can find better, more lucrative jobs elsewhere. Further, the overall training for secondary teachers is considered to be very inadequate.

To overcome this problem, a new model called the "12+3 model" has been introduced on an experimental basis. After receiving their High Secondary Certificate, students spend three years working towards a Bachelor of Science in Education (B.Sc. Education). During this period, they study educational content as well as methodology. To attract talented people, scholarships are offered. The would-be teachers must execute a bond, which states that after completing their education, they will serve the Education Department for at least five years. The scheme has yet to be evaluated.

Development of lesson units, teacher's guides and test item banks. To improve classroom teaching, the National Bureau of Curriculum and Textbooks has developed lesson units for the subjects of chemistry, physics, biology and mathematics at the secondary level. These lesson units are offered for sale and provide information on teaching content and methodology.

Inadequately qualified teachers can improve their teaching skills through the use of the lesson units. Other instructional materials developed by the National Bureau of Curriculum and Textbooks to improve teacher competence include teacher's guides, teaching modules and test item banks for all the major subjects.

Model textbooks. The National Bureau of Curriculum and Textbooks has undertaken the preparation of model textbooks initially in science subjects at the secondary level. It is hoped that these books will serve as exemplars to improve the quality of textbooks produced in the country.

Reforms in process and under active consideration by the Government

Provision of secondary schools in the new housing schemes. A precedent should be established that requires corporations/societies, which are planning housing developments, to provide a portion of land for boys' and girls' primary schools and boys' and girls' secondary schools. Land so provided should be free of any cost or other liability. The housing developers may distribute the price of this donated land evenly among other residential and commercial plots. In making such a provision, any future need for the extension and expansion of the educational institutions should also be considered.

Student/teacher ratio. Ideally speaking, the student/teacher ratio should be 40:1 and the schools should be provided with additional staff to maintain this ratio. Moreover a maximum ceiling on enrolment for a secondary schools should be fixed at, for example, 2,000 students per school.

Teachers' training. The quality of any educational system is judged by the quality of its teachers. If teachers are not qualified for their responsibilities and do not have the required knowledge and pedagogical training, then they cannot meet the needs of the system or their students. Pre-service and in-service teacher training in Pakistan need to be strengthened. Although efforts are being made to improve the quality of such training, much is left to be done in this direction. The modalities must be worked out. The teaching practice period could be extended to at least six months for the pre-service part of the training.

Training of staff in the colleges of education. Colleges of education, which are responsible for training secondary school teachers, should not have untrained members on their staff. The teacher who is himself untrained cannot properly train prospective teachers.

Guidance and counselling services. Guidance and counselling services should be introduced so that students may have the opportunity to express their desires and receive professional advice about the subjects they should study and, consequently, can adopt a study programme to determine their future career.

Provision of incentives. The allowance of Rs. 100 for teachers who are teaching science and mathematics is insufficient. Further incentives must be given to encourage efficient teachers. This may serve in turn, as an impetus to other teachers.

Participation of working teachers in the development of curricula. Secondary school teachers in greater number should be given ample opportunities to participate in curriculum development not only at the provincial level but also at the national level. They should be actively involved in every facet of development, including writing textbooks and teacher's guides and preparing other teaching materials and aids.

Closing Remarks

The Government of Pakistan reviews the nature and status of secondary education periodically to bring about quantitative as well as qualitative improvements. This report on secondary education reforms has provided information on policy planning, administrative and substantive matters about secondary education. It has also highlighted problems in educational planning and development, administration and supervision, curriculum and textbook development, teacher education, and examinations and has presented the innovative programmes and reforms that have been undertaken at various levels by the different leading offices/institutions to overcome these problems. Pakistan's experience roughly represents the secondary education situations in different developing countries of the world and, thus, is worthy of close observation and investigation.

Bulletin of the Unesco Principal
Regional Office for Asia and the Pacific
Number 29, 1988

RECENT REFORMS IN TECHNICAL AND VOCATIONAL EDUCATION

Technical and vocational education in Asia and the Pacific region is going through an intensive evolutionary process. A multiplicity of national models, forms and structures have emerged in efforts to cope with rapid technological advancements and their associated challenges.

There has been considerable progress at the policy and planning levels concerning technical and vocational education in the region. National policies emphasize the promotion and development of such education as an important instrument for national development.

Policy-makers and planners also recognize that the structures, forms, content, methods and processes of education must change to provide young people with more meaningful preparation for their future employment. The need for closer collaboration between education and work programmes and other development programmes in the communities, and effective liaison with industry, agriculture and business enterprises in the selection of skills to be taught, the timing of their introduction and the selection and training/updating of teachers are also priority concerns in most countries of the region.

Policy and Planning

Several of the broad categories concerning technical and vocational education that are specifically mentioned in the national policies of some countries include:

a) Improvement of educational standards and the range of educational programmes provided, improvement of the general quality of education and improvement of the methods for providing education (Papua New Guinea, Western Samoa, Indonesia);

b) Improvement of the facilities for and quality of technical and vocational education leading to an increase in the number of graduates and personnel with technical skills, updating curricula, provision of equipment and materials, training teachers and updating resources (Bangladesh, China, Nepal, Republic of Korea, Papua New Guinea, Philippines and Sri Lanka);

c) Provision of education for particular groups, improvement of education in rural areas, increasing the participation of girls and women and increasing the emphasis on continuing education and youth guidance (Thailand, Fiji, Papua New Guinea, Bangladesh, Indonesia);

d) Improvement of particular areas of technical and vocational education like computer education and science and technology education (Japan, Republic of Korea);

e) Improvements in curricula, upgrading of facilities and buildings, development of educational media facilities, establishment of departments and laboratories for areas of new and emerging technologies, improvements in teaching/learning methods, increasing the level of staff development and in-service training and restructuring the education system (Bangladesh, Fiji, Viet Nam, Thailand, Malaysia, India, Indonesia and Republic of Korea);

f) Involving industry and the private sector in the planning for technical and vocational education, teaching and course development (Bangladesh, Indonesia, Republic of Korea, Philippines and Thailand);

g) Development of procedures to publicize the education system's achievements and progress (Japan, Republic of Korea).

Implementation of National Policies

Despite the great diversity among the areas, population, cultures, levels of development and fields of emerging technology in the countries of the region, every nation's technical and vocational education system is faced with the challenge of training qualified technical personnel in new appropriate technologies and enhancing the productivity of the people through skills updating. Some of the common problems that face them include weak linkages between technical education and local economic activities; difficulties in recruiting, attracting and retaining qualified and trained teaching staff; resource shortages in equipment and facilities; inadequate provision and supply of educational materials and resources; need to update curricula, teaching methods and materials; and the continual need to adapt instructional materials to local needs and conditions. In addition, there are problems relating to a lack of understanding and willingness on the part of industry to work with schools; a shortage of links among schools, industry, business and agriculture; gaps in information on manpower demands; and a lack of interest in technical and vocational education programmes among learners.

Recent Trends and Innovations

Some recent trends in Asia and the Pacific region reflect the changing priorities in the region's development, for example:

a) Effective links have been established between schools and industry, with industry participation occurring in curriculum development and personnel training. Co-operating industries are also providing continuing education in industrial subjects and training manuals are being developed through school-industry consultation;

b) Industry is participating in the development and introduction of modular courses, computer-assisted instructional modules, self-instructional modular kits and sandwich courses;

c) Staff development is focusing on introducing new subject matter in the areas of: new technology, computer education and innovative instructional methods, materials and equipment; and on combining entrepreneurial training with skill training;

d) The development of new integrative instructional courses, such as mechatronics in Japan, combines specialized training from different engineering fields with the aim of producing specialists who can manage and run advanced production systems;

e) Decentralized and individualized approaches to course design, development and review are being promoted at various levels in applied science, engineering and technology and in the development of teaching guidelines and resource materials for the introduction of new technology;

f) Short- and long-range master plans are being developed for curriculum revision/updating, which include courses in new technology areas and the further diversification and/or integration of existing courses;

g) Female participation is increasing in technical and vocational education programmes.

Plans and Strategies for the Future

To develop an appropriately trained workforce for the fast developing information society of the future, several countries are already on the threshold of developing educational programmes and resources for the new technologies, while others are well advanced in this regard. Many countries plan to increase the number and skills of their technical and vocational personnel in technological areas by teaching adaptable, broad-based, analytical and creative skills. Another major aim in several countries concerns improvements in the education system, including increasing the quality and standards of education; eliminating duplication and waste; involving industry in educational programme planning and teaching; modernizing and improving facilities; developing new educational programmes to cater to a variety of needs, such as managerial technology, systems technology, bio-technologies in agriculture and fisheries, and developing and handling new materials including new metals and inorganic compounds. Some specific areas targeted for development relate to:

a) Computer education/literacy in schools;

b) Increasing the use of radio and television as educational mediums;

c) Improving science and technology education;

d) Increasing the number of research activities undertaken by polytechnical institutions;

e) Developing innovative instructional materials;

f) Instituting new courses rather than merely improving and enlarging the teaching contents of existing courses.

In a number of countries, curriculum changes are being incorporated that will foster a student's willingness to learn, teach the student how to learn and to cope with changes in the society, and encourage a deep international understanding and an attitude of respect for national cultures and traditions.

Bulletin of Unesco Principal
Regional Office for Asia and the Pacific
Number 29, 1988

EDUCATION OF THE DISADVANTAGED: PROBLEMS AND ISSUES

Extending educational opportunities to one and all, a declared goal of the countries in Asia and the Pacific is inextricably tied to the educational development of the disadvantaged population groups. With few exceptions, these groups constitute the majority of the population in many countries, making the realization of universalization an extremely difficult if not impossible goal. Improving access not just to education but to education of good quality has become an issue of national magnitude and concern. The countries of the region are at different stages of progress in the achievement of universalization due to their unequal levels of development and other socio-politico-economic factors, but the commitment and concern to realize this social objective remains uniformly strong and deep.

Countries like India, Pakistan, Bangladesh and Nepal face the problem of large-scale illiteracy among the people. The problem of universalization in these countries is largely one of extending educational opportunities to a large part of the population hitherto unserved by the education system and of providing an education that is relevant and responsive to their life needs. In doing so, they must overcome traditional barriers to education, which arise in the form of social attitudes, especially against the education of girls, and the economic factors of poverty and population growth. In the case of China and to some extent, Thailand, the task is mainly to take education to smaller population groups, to previously unreached sections and pockets of the population who have been deprived of educational opportunities because of low economic development or geographic factors. The problems of universalization, looked at as a whole, are similar in many countries of the region in that they originate from economic, social and cultural factors, but they differ in intensity in each country. Uniformly, the strategies towards universalization include enlarging the system, increasing its efficiency and searching for alternative structures and models. More and more facilities are being provided (in the form of more institutions and personnel), existing facilities are being improved, new qualitative inputs are being introduced and the involvement of the people in these national efforts is being sought. At the same time, the search for alternative strategies also continues. There has been significant progress generally in the expansion of education in many countries, (Bangladesh, China, India, Nepal, Pakistan and Thailand). Yet, according to the usual growth indicators of education, there is concern that large numbers of people still remain educationally disadvantaged. Reaching these people by improving their access to the kind of education that would make their lives better and fulfill their social, economic and cultural needs remains a major concern of the countries in the region.

The Educationally Disadvantaged

What constitutes educational disadvantage? Who are the educationally disadvantaged? What factors account for their disadvantage?

Educational disadvantage refers to the situation or state of affairs that is characterized by a lack of opportunities for education, the absence or inadequacy of facilities for education and where such facilities do exist, their poor quality in terms of infrastructure, buildings, equipment, furniture, personnel and performance. More important is the **kind** of education that is made available to the people. If the education does not reflect the needs and aspirations of the people, these people remain, in a strict sense, educationally disadvantaged. In other words, educational disadvantage refers both to the institutions and structures used to impart education and to those factors that are intrinsic to education itself, that is, to its conception, content and quality. Throughout the region, women in general and those in rural areas in particular; people living in isolated, inaccessible and remote areas in mountains and forests; and people living in villages and small habitations do not have similar access to as good an education as others and, therefore, remain educationally disadvantaged. In addition, children belonging to tribal groups, subgroups and nomadic groups; children coming from urban slums or small settlements; and people belonging to certain castes and caste-groups also constitute the educationally disadvantaged.

An analysis of the factors that account for the continuation of these groups as educationally disadvantaged brings out the social, cultural, economic and psychological dimensions of the problems and their interaction. In China (Gansu Province), the problem is one of reaching those people who live in economically backward areas, in remote and mountainous areas and in the national minority's pastoral areas. In India, the scheduled tribes* remain an educationally disadvantaged group because of inaccessibility, poverty, social exploitation, isolation from the mainstream and social discrimination. On the other hand, the scheduled castes* suffer from the dual disabilities of severe economic exploitation and social discrimination. As a population group, they are the poorest of the poor; landless labourers and workers engaged in mining, quarrying, tanning, weaving and other 'menial' occupations. In Nepal, people living in hilly, remote, geographically difficult terrain, who operate on a stagnant subsistence economy and are characterized by a rigid, traditional outlook on life remain the educationally disadvantaged. In Thailand, again the disadvantaged are those who live in remote, hilly areas. A large chunk of the educationally disadvantaged, however, comes from the rural populations of India, Bangladesh, Nepal and Pakistan. This group derives its educational disadvantage from the socio-economic causes of poverty and backwardness. Most of the disadvantaged groups are first-generation learners and victims of strong social attitudes against schooling. The sex factor, however, remains the primary cause and cuts across all disadvantaged groupings. In every country, negative social attitudes towards women's education have kept this group the most backward and disadvantaged educationally.

The main categories of disadvantaged groups in selected countries are listed on the following page.

Education of the Disadvantaged

Social concern about educating the disadvantaged runs deeply in all of the participating countries, as can be seen from the laws they have enacted relating to the universalization of education and constitutional provisions for the protective discrimination of disadvantaged classes. Depending on the incidence and intensity of disadvantage in their population, the countries have translated their obligations into actions through strategies of varying scope and force. In countries like India, Bangladesh and Pakistan, the disadvantaged population is already huge and continues to grow, making the universalization task even more difficult. Population growth and economic backwardness make the problem all the more complex.

---

* Scheduled tribes and scheduled castes are those which have been identified in the Constitution as disadvantaged groups. While 'scheduled castes' refers to the stratified groupings in Hindu society, 'scheduled tribes' refers to minority groups.

The Educationally Disadvantaged

Country	Disadvantaged groups	Cause of status
Bangladesh	Landless people Coolies in tea gardens Orphans Slum dwellers Scheduled castes Under-privileged (street) children Nomadic people	Poverty and cultivators of small social prejudice
China	People in extremely backward economic areas People in remote mountainous areas Herdsmen in the national minority's pastoral areas	Poverty and social attitudes
India	Rural population in general Scheduled castes Scheduled tribes Nomads	Poverty Social exploitation Social discrimination Low social status
Nepal	Population living in remote areas	Inaccessibility Poverty Rigid, traditional attitudes
Pakistan	Rural population Tribal units Nomads	Poverty Negative social attitudes
Thailand	Hill tribes Rural population Slum dwellers Orphans Muslim minority in South Sea nomads* Boat people*	Poverty Negative social attitudes Inaccessibility Lack of appreciation of education

---

* While sea nomads are also called sea gypsies who make the seas their source of living, boat people are those who cross the seas to migrate to other places.

As has already been noted, the target groups differ from country to country. China has to deal mainly with rural, economically backward people and those living in remote, mountainous areas. Thailand and Nepal are faced primarily with the problem of taking education to the hill tribes. In addition to difficult-to-reach groups, large, rural population groups must be approached in India, Pakistan and Bangladesh.

Generally, universalization has made some progress in these countries, but the progress has either been limited or offset by the increase in population. This has created a situation where the percentage of literacy has increased along with the number of illiterates. The problem is one of providing for continually increasing enrolments from these groups.

To improve access to education for these groups, various measures have been launched to provide schooling facilities. But, these facilities are found to be generally insufficient. There are not enough welfare schools in Thailand to cater to all the specific groups. Although primary school facilities have been provided in India to most of the habitations within the national norm of one kilometre, there is still an enormous number of habitations without such facilities. Similar situations exist in Pakistan and Nepal. In China, schools in some mountainous areas are run in caves.

The disadvantaged suffer the most as far as the qualitative inputs into education are concerned. Nine per cent of India's primary schools do not have a building, 35 per cent of the schools have only one teacher. These are the kinds of schools that are mainly available to the disadvantaged classes. Twenty per cent of the rural primary schools in Gansu Province, China are 'simply formed' schools, classes and groups, including half-day and every-other-day schools and morning and evening classes, which are manned by touring teachers and through contract tutoring. Most of the rural schools have insufficient buildings and lack duly qualified teachers. The situation is similar in many other countries in the region.

The enrolment and retention figures for girls in every school system in the region are seriously low compared to the statistics for boys. Factors like culturally assigned sex roles, early marriage, negative social attitudes, and poverty greatly inhibit female participation in education. While progress in enrolment has been achieved, differences in the enrolment percentages between boys and girls continue to persist in all countries in the region.

Dropout rates are also higher in the case of the disadvantaged groups. Generally, children from these groups start school as first-generation learners and because of poor facilities, unrelevant curricula and a lack of teacher support, the institution fails to hold on to them. The dropout rate for these groups in classes I–V varies between 50 to 65 per cent, which is very high.

In addition to the general system of education, separate institutional arrangements have also been made for specific disadvantaged target groups. In India, ashram schools (boarding schools with a vocational bias) are run for tribal children. In Thailand, the various groups are catered to by providing different models of welfare schools and 'ashram' schools for the tribal peoples. Mohallah schools and mosque schools in Pakistan seek to increase access to education for children from rural and remote habitations. Non-formal education strategies are also employed in some countries to reach disadvantaged groups, particularly out-of-school children.

Because it is linked with the group's social and economic development, the educational development of the disadvantaged is beginning to be treated as an aspect of the overall development planning for these groups in different countries. Integrated approaches to rural development and the development of hill tribe areas are being adopted increasingly.

In planning educational programmes for the disadvantaged efforts have been made to orient the curriculum to their specific, local needs and to make it relevant to their life and culture. Vocational training and the development of practical skills that can help these groups meet their life needs are strongly promoted.

Finding an adequate number of qualified teachers to teach in schools that are located in rural and remote areas is a problem generally faced by all countries. To solve this situation, various incentives in the form of increased salaries, subsidies and other kinds of material help are offered.

Approaches to educational planning stress the role of the community and increasing efforts are being made to seek the involvement of the community. Community participation has been enlisted to: mobilize resources; provide school buildings, equipment and furniture; maintain and support teachers; provide general supervision of the schools; and, more importantly, to design a needs-relevant educational programme. Decentralization of the curriculum down to the school unit and the creation of a work-oriented, community-based curriculum constitute the main features of the new approaches to educational planning for disadvantaged groups. These new trends are just beginning to emerge and, for the most part, the educational programmes currently in operation lack relevance and fail to attract children into school.

Problems and Issues

While the educational development of the disadvantaged population groups has been accepted as an important aspect of social policy, efforts to realize this goal must contend with such problems as resources, planning, curriculum, teacher supply and training, community involvement and incentives. These specific problems are set against the more general problems of social and economic development and population growth.

The problem of resource constraints, while affecting all areas of development in general, becomes particularly acute in the case of educating the disadvantaged. A basic condition to be fulfilled for these groups is providing the necessary educational infrastructure including school buildings, equipment and furniture where such facilities do not already exist, and expanding and enriching facilities, where those that are available answer only the barest minimum needs. Countries like India and Nepal, which have to deal with the education of a large number of remotely located tribal and hill population groups, face logistical problems in making the necessary materials and manpower available to these regions because of poor communication facilities and the non-availability of the required infrastructure. Despite large-scale state efforts, the "distance to school" continues to be a factor in the non-enrolment of children in India and Pakistan. Resource constraints also prevent the expansion of educational facilities into the large number of small rural habitations that are scattered throughout the countryside.

The problem of resource constraints on the expansion of educational opportunities for the disadvantaged classes should be looked at in the larger context of overall educational and developmental planning. Whether it is the herdsmen of Gansu Province, the peasants of India, Pakistan and Bangladesh or the hill peoples of Nepal and Thailand, it is the more elemental economic and social factors of poverty and attitude that largely account for the insufficient or non-participation of the disadvantaged groups, even when access to education in the form of the required facilities is provided. The educational development of these groups is inseparably tied to their overall economic and social progress. It must be asked, therefore, whether educational planning alone, without the support of an integrated approach concerning the overall development of these groups, will be able to effectively tackle the problems of the disadvantaged. Realistically, only an integrated approach to the overall development of these groups, which includes education as one aspect albeit an important aspect, constitutes the right planning strategy for the development of these groups. Likewise, it can be argued that educational planning should even be made further specific to particular disadvantaged areas and population groups, if the planning is to be operative for these groups. It is in the context of this thinking that the concepts of 'special planning' in Pakistan and the Special Component Plan for Scheduled Castes and the Tribal Sub-plan for Scheduled Tribes in India have emerged. Similarly, the concepts of integrated rural development and hill development are the result of this general issue with relation to educational planning for the disadvantaged.

More important, perhaps, than the provision of facilities is the crucial problem of motivating these groups towards education. This difficulty is uniformly experienced throughout the region and becomes more acute as illiteracy increases. Generally, rural populations in India, Nepal, Pakistan and Bangladesh remain indifferent towards education and do not recognize education as a critical need. The enrolment of children from these groups and their retention for the required duration of the education programme are a major problem in these countries. Even in countries like Thailand and China, where the disadvantaged are found in small pockets of the population as herdsmen, nomadic groups and tribal units, the problem of motivation poses a challenge. For population groups who have remained out of the mainstream due to ethnic factors, like the tribal groups in India, Nepal and Pakistan, the problem becomes much more serious.

The motivational problem can be seen to have its genesis in the broader issue of curriculum development. If education is to effectively contribute towards the goals of individual and social development, then its means and methods must be flexible and relevant to the assumed needs and aspirations of the target population and should be specifically oriented to their life skills. Historically, formal education has been a preserve of the privileged classes, its curriculum largely fashioned by the ideals and value systems of these classes. Thus, today it has taken on a highly academic character. If education is to reach the masses, its curriculum must be reoriented to make it responsive and specifically suited to the needs and problems of the illiterate and semi-literate populations. This involves a drastic change in the general outlook on the curriculum and requires the identification of the specific problems and needs of the target populations. Then, systematic and deliberate efforts must be made to solve these problems through the curriculum. It is only when the disadvantaged groups see that education provides a hope for solving their basic physical, social, emotional and economic needs that they can be motivated to seek it. The challenge, therefore, is to involve methods and mechanisms to design and effectively implement such a curriculum. One of the identified needs of the tribal populations, for example, is training in a vocation or craft. Experiences in different countries have shown that where such training has been incorporated in the curriculum and implemented effectively, the programme of education for such groups has been quite effective.

The curriculum problem and its analysis uncover several dimensions, which need to be considered in detail. First of all, there is the place of language both as a subject of study and as the medium for learning. Tribal units in all countries are considered educationally disadvantaged because of their non-familiarity with the national school language. Tribes in India, Nepal, Pakistan, Thailand and Bangladesh speak their own languages and/or dialects and find it difficult to participate in curriculum transactions because they are not discussed in their mother tongue. While it is accepted generally that education must be attempted through a child's mother tongue at least in the beginning years, it has not been possible to translate this principle into practical action for the tribal populations. Apart from this, controversies surround the issues of what different languages are to be studied when and to what extent. There is also the problem of preparation and supply of instructional materials in the tribal dialects to these disadvantaged groups, which is obviously no small problem either.

A more general issue, although related to the question of language, is that of curriculum orientation. One reason why disadvantaged groups do not go to school, as has already been noted, is the non-conformity of the curriculum to their life and culture. It has also been noticed that children who do go to school tend to become alienated from their communities. On the one hand, education is expected to cater to the culture-specific needs of particular groups to make it meaningful and functional for them. This expectation encourages the creation of specially tailored curriculum designs that answer the perceived needs and aspirations of those people. On the other hand, education is also expected to function as a promoter of social mobility and change and to help individuals and groups enlarge their spheres of existence and operation and integrate them into the larger humanity. Thus, curriculum must operate as a conservative force and also as an agent of dynamic change, and the issue becomes how to harmonize these two functions realistically.

The retentive power of the school, which invariably is low in schools catering to disadvantaged sections of the population, is linked to the problem of curriculum relevance. Drop-out rates and stagnation are afflictions generally experienced by all countries, however, the dropout rate among disadvantaged groups is alarming in countries like India, Pakistan, Bangladesh and Nepal. Socio-economic factors such as social attitudes against the education of women, lack of motivation, children who are required to work at home or in the family business, poor health and so on, largely account for the high drop-out rates. But, the educational factors of quality and the attractiveness of schooling are no less important. Irrelevant curriculums, unimaginative and rigid teaching methodologies, and an inflexible examination system, even in schools that are well-equipped, only discourage children from continuing their education beyond what is mandated by the government. Making formal education attractive to children coming from homes where no tradition of schooling exists, where the children are first-generation learners, remains a common challenge.

Another commonly experienced problem is that of finding an adequate number of qualified teachers and improving poor teacher performance. First of all, there is the need to overcome the reluctance of teachers to serve in remote and isolated areas. Whether it is India or Nepal, Pakistan or China, Bangladesh or Thailand, teachers are generally unwilling to work in remote areas. In some countries, teachers are leaving the teaching profession to take up other jobs offering better conditions. It is also hard to find enough teachers for certain specific subjects. Often teachers are poorly qualified and lack adequate professional training. In Gansu Province, China, a considerable number of teachers, who are teaching in mountainous and disadvantaged areas, do not meet the standards for graduates of secondary teachers' training schools and their performance leaves much to be desired. Establishing a steady stream of qualified teachers has become a key problem in China. In India, the main problem involves persuading teachers in sufficient numbers to serve in rural and tribal areas. Because of very severe resource constraints, a large number of schools in Indian villages remain single-teacher institutions. The same situation also exists in Pakistan and to some extent in Bangladesh and Nepal. An even more acute problem is finding an adequate number of women teachers who are willing to work in rural and inaccessible hill and forest areas.

Teacher quality and performance levels are dependent on the quality of professional training. While all countries have their own systems for teacher training, there is general dissatisfaction with the quality of what the systems produce, particularly in the case of teachers for disadvantaged children. It is obvious that the key to the successful implementation of educational programmes for the disadvantaged lies in the training and supply of teachers, who have the skills and competence to teach children from disadvantaged groups and the right kind of motivation, attitudes, values and commitment. A very important issue in this regard is whether teacher preparation, which has largely involved only general preparation, could be reoriented to specifically focus on the teaching of disadvantaged children.

Various efforts have been made to attract teachers to rural and remote tribal areas, including incentive schemes offering hill allowances, increased salaries and payment in kind. However, the problem persists of finding an adequate number of competent teachers for the target groups and evolving a training mechanism that will supply a steady stream of such teachers. Educational efforts, especially those that are directed at the disadvantaged groups, cannot make much headway unless efforts are also launched simultaneously to involve the larger community in the education of their children.

Involving the community in the educational efforts of the state is particularly significant in areas where social attitudes against education are firmly established, such as rural areas, tribal and hill population groups and, in general, areas where the educationally disadvantaged are found in large numbers. The Chinese experience of pooling money from rural collective organizations for education and involving the peasants in the establishment and running of schools is a successful example of how the reservoir of potential that exists in the countryside can be used in running the educational enterprise. There are other examples of successful educational experiments, whose success is derived to a large extent from community involvement and co-operation. In concrete terms, involvement of the community means enlisting parental support for the education of children first. The lack of such support, as the experiences of all countries reveal, constitutes a major factor accounting for the non-enrolment and withdrawal of children. Second, it means the active participation of the community in the education of its children by making the necessary resources available. Such involvement depends on building up the necessary motivation towards education and an appreciation, on the part of the community, of the role of education in bettering their lives. Countries afflicted with the problem of non-participation in education by large masses of the disadvantaged population trace it to a lack of motivation, a failure to see that education provides a means of social and economic emancipation, and to a general apathetic attitude towards education. Overcoming these perceptions and attitudes and making education community-based and community-directed remains a major problem throughout the region.

Social justice calls for positive and protective discrimination in favour of the disadvantaged population. The principle of differential treatment in favour of the oppressed and poor and the institution of necessary compensatory education for these people by the State are based on the acceptance of the basic human values of equality and justice. Many countries have enacted legislation to protect and promote the interests of the educationally disadvantaged and have instituted different schemes of incentives, rewards, compulsion and punishment in accordance with their socio-cultural needs. Yet, designing a suitable scheme of incentives that is effective in practice remains a problem. In India, although a variety of incentives have been offered for a number of years, including free tuition, scholarships, mid-day meals, free stationery and uniforms and free textbooks, they have not yielded the expected results. This may be due to the fact that the incentives offered are very meagre. Intensifying and expanding the incentive schemes to cover more areas would mean increased educational expenditures, which are prohibited by existing resource constraints. It must also be noted that in some countries social tendencies exist that are unfavourable towards affirmative action policies.

It is increasingly evident that the solutions to the educational problems of the disadvantaged should be sought in alternative systems of education while simultaneously bringing about improvements in the existing system. India, Pakistan and Bangladesh are faced with the difficulty of accommodating growing numbers of disadvantaged school-age children, which the existing system will not be able to cope with; thus, they are searching for alternative strategies that use non-formal educational channels. While the primary objective of non-formal education is commendable: providing a flexible, target-group-designed, needs-relevant education; the extent to which it has been realized is a matter of debate. Further, the quality of education imparted through non-formal education and the links that are needed between the formal and non-formal educational systems are also important issues.

Perhaps the most difficult problem of all and one which all countries are facing relates to the education of girls and women. Deeply rooted, hostile social attitudes against the education of women, especially those belonging to the disadvantaged groups, constitute a major obstacle in countries like Bangladesh, India, Nepal and Pakistan and stand in the way of the universalization of education. Literacy and enrolment figures for women in the different disadvantaged groups and in the different stages of education tell their own story. In fact, it has been recognized that the problem of universalization is essentially a problem of the education of women, and this realization is manifest in the general social and educational policies of the region, particularly in South Asia. Fostering positive attitudes among the people towards women's education clearly requires a mighty effort of social education.

Innovative Projects/Schemes

Several innovative projects and schemes in the education of the disadvantaged groups have been started in the region, which are at different stages of progress. A list of these projects and their salient features are presented in the box at the end of this paper. The projects vary in range and scope. While some are national projects having a wide sweep, others are restricted to specific areas and target groups. The innovations cover almost all aspects of education from educational planning and structure to curriculum, methodology, teacher training, evaluation and certification, school and classroom management and community participation. The basic principles of successful educational planning for the disadvantaged are not much different from educational planning in general: the right kind of education, the right kind of facilities, need-based and life-relevant curriculums, sound methods of instruction, skilled and competent teachers with the right attitudes and the wholehearted involvement of the community. The only thing to be remembered is that these things are needed in much greater measure and intensity by the children of the disadvantaged than by others, because most of the children start with severe social, cultural and economic handicaps. The projects and schemes listed exhibit this sensitivity (although in different degrees) to the peculiar problems of the educationally disadvantaged in their objectives, approach and activities.

The disadvantaged problem is not something that has suddenly appeared from nowhere without any historical continuity. It is a problem that countries have been tackling ever since they accepted the ideology of mass and universal education. In the process, a large amount of experience has been acquired and lessons have also been learned from the successes and failures of earlier efforts. Despite continuing efforts, the problem of improving access to education for the disadvantaged not only remains unsolved but has become more severe in most countries. This situation has prompted a critical review of past experiences and approaches and has generated a search for new ideas and approaches. Many new trends are already in evidence in the educational development of the disadvantaged classes in planning, organization and management, curriculum, teacher training and evaluation. Among these are:

a) A holistic approach providing pre-primary education and, thereafter, primary education at the same location;

b) Development of elementary schools in rural areas as the focal points for community development allowing integration of services provided by various departments;

c) Propagation of non-formal and open systems of learning;

d) Roaming or touring teachers for nomadic areas;

e) Alternate-day schooling or morning/evening classes;

f) New teacher training models in consonance with the needs of specific disadvantaged groups;

g) Network organization for improving the quality of classroom instruction, such as pedagogical research offices at the county level and a resource centre for a cluster of schools;

h) Decentralized planning and management;

i) Increased use of the mass media for supportive, enriching and substitutive roles.

Conclusion

The problem of educating the disadvantaged is much too serious and urgent to be tackled through soft approaches and methods. The disadvantaged sections have remained victims of social neglect and poverty for centuries, and education can mean emancipation for them from social and economic limitations and a freer, richer life. The educational realities facing these people — the absence of basic school facilities, equipment and furniture; irrelevant curriculums and outmoded teaching methods; unmotivated and incompetent teachers and, in their view, the purposelessness of the whole educational exercise — should be squarely faced and accepted as genuine impediments to education, which cannot be soft pedalled or wished away. There are not any shortcuts to the problems of the educationally disadvantaged. It should be obvious that the educational salvation of these people lies in the amelioration of these ills. Educational and social policy-makers should take note of this basic postulate and manifest its meaning in bold, hard, realistic action and strategies. Only then can there be hope for the educationally disadvantaged.

Innovative Projects/Schemes to Improve Access to Education for Disadvantaged Groups

Country	Project/schemes	Special Features
Bangladesh	Community Learning Centres (in primary schools)	Involvement of peasants, community and government officials in management, parent-teacher associations to look after school welfare and ensure children's attendance, school not just a place for the education of children but a pivot for community activities.
	"Sabuj Sanga" – a project of the Bangladesh Academy for Rural Development.	Main objectives: life-centred education, practical knowledge, earning while learning.
	Literacy programme	Focus on skill development for the 11–30 age group, responsibility rests with primary school and the local community.
	Universal primary education project under Third Five-Year Plan (1985–1990)	Decentralization of primary education at the upa-zila level, integrated school development approach, special facilities for tribal people, cluster training for teachers at the school level.
China (Gansu Province)	Universalization of primary education	Different targets for different areas, classification of schools according to facilities and fixed differential goals, mobilization of community resources and involvement of community in running of schools, coupling elimination of illiteracy with universalization of primary education, on-the-job teacher training, system of job responsibility to ensure implementation.
India	Comprehensive access to primary education	Non-formal mode of education for out-of-school children; target-group-oriented; flexible, problem centred and work-based curricula and 'learning episodes'; decentralized, local-specific curricula; openness in time and donation of learning in curriculum, methodology and evaluation; provision for certification and movement to the formal system.

Country	Project/schemes	Special Features
India (cont'd)	Developmental activities in community education and participation	Non-formal education for different age groups sustained and supported by the community, new types of educational activities designed to meet the minimum educational needs of target groups.
	Primary education curriculum renewal	Local specific learning experiences through decentralized curriculum planning, identification of essential competencies to be attained and the concept of Minimum Learning Continuum.
	Ashram schools	Residential-type institutions for tribal children with stress on self-reliance and self-sufficiency, craft-based education in addition to general education.
	Inter-village schools	Improving access to tribal children living in small and remote hamlets, school centrally located and equidistant from all hamlets, with boarding and lodging facilities.
	Non-detention system	Students allowed to proceed from class to class without fear of detention in the event of failure, overcoming waste due to stagnation, continuous evaluation and guidance.
	Multiple-point entry	Opportunities for entry into any class at the elementary stages, flexibility, bridges between formal and non-formal system.
	Non-formal education programme	Thrust on education of girls, flexible structure, local specific curricula.
	Incentive schemes	Free textbooks, stationery, uniforms and scholarships, mid-day meals.
Nepal	Integrated hill development project	Promotion of education as an integral part of overall developmental plan, expansion and quality improvement of primary and adult education.

Country	Project/schemes	Special Features
Nepal (cont'd)	Education for rural development – SETI project	Directed at educational development in remote areas, designed to make teachers the agents of change for rural development, 'Cheli Beti' classes for out-of-school girls, resource centre to provide continuous training for teachers of surrounding schools with supportive supervision.
	Incentive schemes	Special allowance for teachers working in remote areas and scholarships for the needy and for girl students.
	Free textbook distributions	Free textbooks for all girls enrolled in primary schools in 18 remote area districts.
	Education of girls	Girls recruited from the rural areas and remote areas for upgrading courses (grades VIII–X) and B-level teacher training (primary school teacher training for girls who have completed grade X).
Pakistan	Mosque/mohalla schools	Saving on development expenditures, using religious education as part of the teaching programme to attract rural communities, shorter school time, flexibility in working.
	Integrating rural education in development	Non-formal mode of education, skill training, avenues for supplementing family income, involvement of local communities in the supervision and management of the programme, flexible school times.
	Mobile teachers	School-on-the-move with the community, teacher comes from locality even if he does not fulfill the required qualifications.
	Lady teachers's hostel school	Transport for lady teachers going to schools with boarding facilities.
Thailand	Welfare schools	Exclusive schools for different kinds of educationally disadvantaged children, boarding facilities, emphasis on vocational training, financial support for students.
	Pre-school education project	Schooling readiness in Thai language for children having local dialects as mother tongue.

Country	Project/schemes	Special Features
Thailand (cont'd)	Barefoot teacher schooling	Sharing of teachers' services among two to three villages.
	One-teacher school	Flexibility of movement for hill-tribe people.
	Self-help schools	Boarding schools with stress on self-help.
	Co-operative management model	Involvement of parents in the education of children.

Bulletin of the Unesco Principal
Regional Office for Asia and the Pacific
Number 29, 1988

ASIA-PACIFIC PROGRAMME OF EDUCATION FOR ALL: A REFORM IN MASS EDUCATION IN ASIA AND THE PACIFIC

Universalization of Primary Education and Basic Education

"Universal primary education was first adopted as a goal for the countries of the Asia region in the 'Karachi Plan' (1960), which proposed that . . . ." every country of this region should provide a system of universal, compulsory and free primary education of seven years or more within a period of not more than 20 years (1960-1980) . . .'. This target has not been attained, due in part to a more rapid expansion of the population than foreseen in 1960. However, some of the shortfall is attributable to a slackening of the expansion of primary education in the early 1970s, which followed changes in the education and development policies of some countries".[1]

Universalization of primary education (UPE) remained the goal of the countries of Asia and the Pacific region in the 1970s and 1980s. Many countries have registered very impressive enrolment growth in their primary schools, but their records in the retention and graduation of children from primary school have not been laudable. The student survival rate in primary school is often less than 50 per cent. Thus, it has gradually become apparent that UPE should be achieved in all three dimensions of primary education, i.e., enrolment, retention and graduation.

The available data shows that a large number of children are out of school in the region. In some countries, there are more children out of school than in. For example, in 1980 in Nepal, an estimated 1,227,000 children were out of school whereas there were 1,068,000 in school. In Pakistan, while the number of in-school children totalled 5,474,000, out-of-school children numbered 8,109,000.

---

[1] Working document of the Fifth Regional Conference of Ministers of Education and Those Responsible for Economic Planning in Asia and the Pacific (MINEDAP V), 1985 (ED-85/MINEDAP/3).

Recently, countries have begun to appreciate the intimate relationship between primary education and the literacy rate in a country. Primary education is a major input in the literacy effort; the literacy rate is its output. A weakened primary education system leads to lowered enrolment rates and increased drop-outs from the primary schools and when these children relapse to illiteracy, they automatically add to the illiterate population.

Mr. Baldwin Ranson studied rural education and economic development in China, Mexico, Japan and the U.S.A. He found that due to their literate population, Japan and the U.S.A. were successful in modernizing their agricultural sectors using scientific and technological knowledge, whereas China and Mexico could not do so due to their illiterate rural populations. He concluded that "a basic education explicitly designed to promote scientific inquiry (discovering general principles from special case observation) and technological inquiry (discovering special-case application of scientific principles) will reduce the gap between theory and practice, integrating mastery of verbal and numerical symbol skills (literacy skill) with their applications, so that the bulk of each nation's population will develop competencies necessary for sustained economic development".[2]

Earlier literacy programmes and primary education were seen as two separate programmes, one for the children and another for the adults. Therefore, people argued that the countries should stress primary education in their limited budgets, and that the literacy programme should not be promoted at the cost of primary education. Many people also believed that the problem of illiteracy would eventually be solved using mandatory primary education programmes to reach every child in the region.

Actual experience has demonstrated the folly of such simplistic assumptions. First, the primary schools have not been able to enroll every child, especially those in the rural areas. Girls and children from disadvantaged population groups remain out of school, and the existing primary schools have not been able to cope with the increasing numbers of children who are coming of school-age.

---

[2] Ranson, Baldwin. ***Rural Education and Economic Development in China, Mexico, Japan and the United States.*** ***Comparative Education Review,*** Vol. 32, No. 2. May 1988.

In addition, data shows that in the last two or three decades, second-level and third-level education programmes have expanded at a much faster rate than education at the first level. The enrolment growth rate in primary education was at 0.8 per cent between 1975 and 1985, whereas annual enrolment grew at 3.3 per cent and 4.8 per cent in the secondary and tertiary levels in the same period. These shifts occurred as leaders and development authorities shifted their priorities from mass primary education to secondary vocational and tertiary education in an effort to accelerate economic development. This phenomenon has raised the problem of relevance in education and, in some developing countries it has even generated educated unemployment.

The neglect to basic education by the countries of the region was mimicked by the international organizations and international banks. Until recently, the World Bank had no lending programme for mass education. It began offering lending for education in 1963 and from 1963 to 1969, 84 per cent of the funding went to secondary vocational education and 12 per cent to higher education. None was given to primary education From 1970 to 1974, the World Bank reports that 50 per cent of its loans were for secondary education and 40 per cent for higher education.[3]

Although there has been a slight improvement in the literacy rate in the Asia and Pacific region, the absolute number of illiterates is growing at an alarming rate. The literacy rate for the region improved from 54 per cent in 1970 to 64 per cent in 1985, but at the same time the number of illiterates increased from 636 million in 1970 to 666 million in 1986. About 70 to 80 per cent of these illiterates are below 25 years of age.

There is now enough evidence that improving the quality of life and living standards for the common people cannot be achieved without mass education. However, a vicious circle has been created by the sporadic and haphazard efforts of Asia's developing nations to improve their systems of education and, thus, enhance their development. This has resulted in the discovery that primary education alone cannot provide mass education for all, and there is a lack of resources to spend on non-formal basic education. Without basic education, the majority of the youth and adults (between 10 and 30 years of age) in Asia and the Pacific region cannot take advantage of the scientific and technological knowledge that will enable them to produce more and improve their lives.

---

[3] Adiseshiah, Malcolm. ***Trends and Prospects in Education.*** Unesco, 1985.

This complex situation was a topic of discussion during the Fifth Regional Conference of Education and Those Responsible for Economic Planning (MINEDAP V) held in 1985. The participants recognized that "there was unanimous expression of concern that illiteracy continues to be a major developmental and educational problem in several countries of the Region". Therefore, the Conference unanimously recommended that Unesco should prepare and launch the "Asia-Pacific Programme of Education for All" (APPEAL). This recommendation was approved by the Twenty-third Session of the General Conference of Unesco in 1985, and the Director-General of Unesco launched APPEAL from New Delhi, India on 23 February 1988.

APPEAL is an historic attempt to reform mass education in Asia and the Pacific. For the first time, primary education, literacy and lifelong education are being combined in one programme using an integrated approach.

The aims of APPEAL are to eradicate illiteracy, to universalize primary education and to provide continuing education for development in Asia and the Pacific. The underlying principle is that the eradication of illiteracy and the universalization of primary education lay the foundation of basic education. Thereafter, continuing education will establish an interactive and dynamic relationship between education and development.

There is growing recognition of the role of human resources in national development. The newly industrialized countries of Asia have demonstrated that the key to development is human rather than natural resources. As the world moves toward knowledge-intensive industries that are spearheaded by hi-tech industries, human resources will play an ever greater role in national development.

Human resource development has to be balanced at all levels, high and low. This is a challenge to all policy-makers of education and development in Asia and the Pacific as the twenty-first century approaches.

Many countries in the region are quite aware of the importance of mass education in their national development and some of them have taken concrete steps to reduce illiteracy in this century. The State Council of the People's Republic of China issued its "Regulations on the Literacy Programme" on 5 February 1988. It states: "Local people's governments at various levels shall take all measures to supervise the Basically Literated Units (BLU) to make plans for the eradication of remaining illiteracy and raise the literate percentage in persons who are 15-40 years of age to more than 95 per cent". The regulation provides a detailed system for planning, monitoring and evaluating the literacy programme in China.

Likewise, the Government of India launched the "National Literacy Mission" in May 1988, which has as its objective to "impart functional literacy to 80 million illiterate persons in the 15-35 age group, that is, to 30 million by 1990 and an additional 50 million by 1995". The Government of India has carried out a number of actions to set up an organizational and technical infrastructure that will ensure the success of the mission.

The famous "Kejar Programme" of Indonesia is scoring continuing success in the eradication of illiteracy. Between 1960 and 1980 illiteracy was reduced by 35 percentage points in Indonesia. It is expected that Indonesia will be able to achieve a very high literacy rate by the year 2000.

Having reduced the illiteracy rate to 10.5 per cent in Thailand in 1986, the Government of Thailand has acted to provide continuing education to the people, especially youths. The sixth phase of the Non-formal Education Development Plan 1987-1991 makes the following provision:

"Promotion of literacy will be undertaken on a large scale for out-of-school people, especially those in the working age group, so as to enable them to read and write their language proficiently. It will never miss a good opportunity to further their study when needed".

It is obvious that the region's Member States had already taken action to universalize primary education and eradicate illiteracy before APPEAL was launched. The regional study of APPEAL preprepared for the first meeting of the Regional Co-ordination of APPEAL made the following observations:

"Even before the launching of APPEAL, most of the countries in the region enunciated policies for the provision of Education for All in different legal documents ranging from the highest mandate of the land, such as the Constitution, as in the case of India, Malaysia, Philippines and Thailand; State Commission policies as in Indonesia; in the Resolutions of Central Committee of the Ruling Party, as evidenced in the case of Viet Nam; to implementing orders including Presidential Decrees, Executive Orders, etc., such as those found in the Philippines; State Policy Directions as in Indonesia; education policies as in Malaysia; Popular Education Policy as in Viet Nam; and the Economic Development Plan of Thailand. These were then translated into operational forms in medium-term plans, into ministry/department plans and into plans for the various groups and organizations charged with the responsibility of providing Education for All in order to eradicate illiteracy".

APPEAL has provided an opportunity for Member States to work together, to learn from each other's experiences and to develop innovative projects jointly. APPEAL is actually a collective pledge of the Member States in the region to achieve the common goal of Education for All.

One of the very valuable lessons of APPEAL is that national initiative and commitment are the primary conditions for the success of mass programmes like literacy and primary education. But, such national actions are strengthened and reinforced by regional and international co-operation.

The World community has reiterated the need to eradicate illiteracy. The United Nations General Assembly in its Forty-Second Session declared 1990 as International Literacy Year and asked Unesco to prepare a Plan of Action to be launched in 1990 to eradicate illiteracy by the year 2000. This mandate will certainly give a big push to the world campaign for the eradication of illiteracy.

The famous historican Arnold Toynbee predicts, "Our age will be remembered, not for its horrifying crimes or its astonishing inventions, but because it is the first generation since the dawn of history to believe it practical to make the benefits of civilization available to the whole human race".

APPEAL provides an opportunity for Asia and the Pacific region nations to make this prediction come true. The long march to provide Education for All has just begun. It will not be an easy journey, for there are many hurdles to cross and many thorny issues to be tackled.

The first meeting for the Regional Co-ordination of APPEAL (Bangkok, 14-18 November 1988) indicated that the first problem to be tackled would be to provide primary, literacy and continuing education to girls, women and socially, culturally and geographically disadvantaged populations.

The second most urgent issue would be the quality and relevance of the Education for All movement. It is not enough to be satisfied with the growing number of people participating in the education programmes. These programmes must deliver the knowledge, skills and attitudes required for the people's development. In this regard, the whole approach to the planning and management of mass education should be improved.

It is time for education planners and managers to go to the villages and school units, discover what the real problems are and then improve the planning and management process to ensure that true teaching and learning occur. In doing this, they will, thereby, assure the development of the individual and the steady progress of the community for the benefit of all.

Bulletin of the Unesco Principal
Regional Office for Asia and the Pacific
Number 29, 1988

HIGHER EDUCATION REFORM IN INDIA, JAPAN AND CHINA

Higher education is a powerful instrument for social, economic and political change. It produces the high-level manpower and research needed to sustain and promote a country's development efforts. But, higher education is often confronted with problems in its internal functions and in its relationship to the nation's development processes. Currently, educational reforms are underway in many countries, which take numerous approaches. This section presents a synopsis of on-going efforts in higher education reform in three countries: India, Japan and China. The information presented here is based on government publications and on papers presented at a regional seminar on higher education reform.

India*

Higher education reform in India must be seen in the context of general education policy for the country. The National Policy on Education – 1986 puts greatest emphasis on the universalization of education and on the improvement of the quality of public education. Emphasis is also laid on a "national core curriculum" as a key element in the curriculums of all levels. This core curriculum is aimed at: promoting national integration through understanding and appreciation of India's common cultural heritage and its composite richly diverse culture; promoting egalitarianism and democracy; and promoting secularism and scientific and moral values. Research and development is viewed as a way to guarantee national self-reliance. The reform policy envisages that networks between different institutions will be established to pool their resources and take part in projects of national importance. In life-long education, the future thrust will be in the direction of open and distance learning.

---

* Based on: 1. ***National policy on education – 1986.*** Ministry of Human Resource Development, Government of India, New Delhi, May 1986.

2. ***National policy on education: programme of action.*** Ministry of Human Resource Development, Government of India, New Delhi, November 1986.

At the higher education level, the institutions that influence the national system of education are the University Grants Commission, the All-India Council of Technical Education, the Indian Council of Agricultural Research and the Indian Medical Council. These bodies will jointly develop an integrated plan to establish functional linkages among themselves and to reinforce programmes of research and post-graduate education. These bodies, together with the National Council of Educational Research and Training, the National Institute of Educational Planning and Administration and the International Institute of Science and Technology Education, are expected to play a major role in implementing higher educational policy.

Present situation and direction of reform. India has a large system of higher education comprising about 150 universities and 5,000 colleges. One of the problems these institutions face is the uneven provision of facilities. Large research input has gone to the better-equipped laboratories outside the university environment. In addition, the courses offered by the universities have not been adequately revised to suit the present demands of the community.

The policy emphasizes that universities should move forward into innovative teaching and research. The future thrust of higher educational reform will be on the greater autonomy of colleges and departments to administer and manage themselves, and to interact across boundaries of institutions and funding agencies. The major concerns focus on improvement of the infrastructure, rationalization of funding for research and proper integration of teaching and research.

Facilities and infrastructure. To tackle the problem of uneven provision of facilities and infrastructure, it is proposed to consolidate and expand the facilities in existing institutions. The State Councils of Higher Education are to prepare co-ordinated programmes to consolidate the existing institutions and their infrastructures and adopt measures to strengthen non-viable institutions, particularly those situated in rural areas. In terms of funding, the University Grants Commission is developing the baselines for appropriate funding for universities and colleges in accordance with their enrolment and the nature of the courses offered. On the basis of these baselines, a plan to equip the existing institutions will be implemented phase-by-phase. For the time being, however, admission will be regulated on the basis of existing physical facilities. As for the establishment of new institutions, the adequate provision of physical facilities for them must be ensured.

Development of autonomous colleges. Concern has been expressed that the current system of college affiliation does not give autonomy to deserving colleges. It is expected that during the Seventh Plan period (1985–1990), approximately 500 colleges will be developed as autonomous colleges. Guidelines will be framed to render assistance and incentives to these colleges to enable them to function well as autonomous institutions. Detailed studies will also be carried out to develop alternative types of university-college relationships, which could replace the existing affiliating system. For this purpose, the programmes of the autonomous colleges will be fully funded by the Central Government through the University Grants Commission for the first five years.

Course revision. There is growing criticism that the programmes currently offered in higher education institutions do not meet the growing demands of specialization nor do they incorporate practical training or a creative learning process. There is little flexibility in the combination of courses, which limits mobility among courses or institutions. To solve these problems, the University Grants Commission's guidelines on course restructuring have been reviewed comprehensively to incorporate new concepts, content and structure. In the process of restructuring, emphasis has been placed on 'foundation courses' as an important element of all undergraduate programmes. These courses cover such topics as the study of India's composite culture and women's studies. In addition, greater emphasis is given to interdisciplinary programmes and the relevance of courses to work. Local initiatives will be encouraged in the course designs especially in the application-oriented components. To these ends, regional and national seminars will be organized to generate enthusiasm and commitment among educational administrative and teaching staff for the new course designs. The University Grants Commission has set up 24 curriculum development centres to implement its policies. Between 1987 and 1989, model course material in 15 subjects will be developed in the form of audio/video cassettes to be used for self-instruction and as radio/TV broadcasting programmes.

Teachers' training. It goes without saying that the quality of higher education depends largely on the quality of teachers as transmitters of knowledge and innovators of new disciplines. It has been recognized that the present system does not accord teachers the proper opportunities for professional and career development or provide conditions that encourage initiatives in innovation and creative work. Teachers lack a proper orientation in concepts and techniques and need a value system to fulfill their roles and responsibilities. To remedy this situation, staff training programmes have been emphasized both for in-service teachers and new entrants. For new entrants, orientation programmes will be designed covering such subjects as teaching methodologies, pedagogy and educational psychology. There will be refresher courses for in-service teachers. Teachers are also being encouraged to participate in seminars, symposia and meetings to keep abreast of current issues and to participate in self-learning programmes. As of October 1988, 46 academic staff colleges had been established in various universities for this purpose. In addition, the management systems of universities are undergoing changes to allow opportunities for greater teacher participation at all levels of academic administration.

Promotion of research. The National Policy on Education has placed great emphasis on research as an essential component of higher education, in that it brings new knowledge and insights as well as dynamism to the educational process. However, many research institutions exist outside the university system. Yet, it has been recognized that the research carried out in institutions of higher learning give these institutions a crucial role in national progress, self-reliance and security. To promote university research functions, several measures have been proposed including: (a) strengthen the infrastructure and enhance research funding for universities; (b) set up co-operative research facilities in universities; (c) foster formal links with other research agencies; and (d) introduce the subject of research methodology in the curricula to encourage students at undergraduate and post-graduate levels to take part in creative, multi-disciplinary research. In addition, a National Research Foundation is to be set up to co-ordinate the funding of research in universities and control the quality of the research.

Improvement in efficiency. As a measure to improve the overall efficiency of the higher education sector, computerization of the administrative work of the institutions of higher learning has been proposed. This will lead to the establishment of a computer network for selected institutions, which will allow them to share academic information, develop on-line consultancies or interaction between researchers with the same interest, and establish a network of regional libraries to ensure access to the information and source materials that are essential for research.

Open university and distance learning. The new policy notes that an open university system augments opportunities for higher education and provides a flexible and innovative system of education. To serve this objective, the Indira Gandhi National Open University was established in 1985 with the prime responsibility of co-ordinating and standardizing the country's distance learning system. It offers diploma courses and preparatory courses for undergraduate programmes. The courses are structured in a modular pattern that permits the accumulation and transfer of credits from a formal to non-formal system. To further democratize higher learning, a network of distance teaching institutions will be developed, which should allow students to transfer credits across different institutions. To maintain the quality of teaching, staff training programmes should be organized in close collaboration with the Indira Gandhi National Open University.

Japan*

Japan's educational system has undergone a series of major reform initiatives, the first of which was introduced as early as 1872 during the Meiji era. During this period, Japan adopted an industrialization strategy to build up a significant defense in the face of external military threats. The first educational reform was thus intended to encourage and facilitate the importation and dissemination of modern science and technologies in favour of the nation's military strength.

---

* Based on:

1. ***First report on educational reform.*** National Council on Educational Reform, Government of Japan, 26 June 1985.
2. ***Second report on educational reform.*** National Council on Educational Reform, Government of Japan, 23 April 1986.
3. ***Third report on educational reform.*** National Council on Educational Reform, Government of Japan, 1 April 1987.
4. ***Fourth and final report on educational reform.*** National Council on Educational Reform, Government of Japan, 7 August 1987.
5. ***The recommendations of the national council on educational reform: a summary.*** National Institute for Educational Research, Japan, March 1988.

The second reform began immediately after World War II. It followed the basic, initial strategy, but its ultimate goal shifted to the wealth of the nation. Education in the post-war period emphasized the rehabilitation of the country and the expansion, universalization and standardization of education. Direct handling of spiritual and cultural values was avoided. Instead, more attention was paid to quantitatively measurable, simple values such as enrolment ratios, national income, shares and profits, salaries and receipts of income.

During the period between 1967 and 1971, the Central Council for Education deliberated on the third educational reform and, in 1971, published a report entitled ***Basic guidelines for the development of an integrated educational system for the future.*** Evidently, the report did not clarify the nature of the 'third educational reform' and, consequently, several ambitious projects were not implemented.

The latest educational reform was initiated with the establishment of the National Council on Education Reform in 1984. This Council has submitted four reports and a summary of its recommendations has been recently compiled and produced by the National Institute for Educational Research in March 1988.

Basic concepts for educational reform. Japan has shifted from the stage of 'catch-up' modernization to maturity as an advanced industralized nation. The emphasis of the current educational reform has shifted from the promotion of universalization and standardization to individualization, diversification and enhancement of higher education institutions. To better respond to the diverse demands of the society, institutions of higher learning are expected to contribute to both the development of qualified human resources and the advancement of creative scientific research. They are also expected to play an important role in providing people with opportunities for life-long learning by being more open to and more co-operative with the society.

Individualizing higher education institutions. In the course of modernization in Japan, the educational system has focused on efficiency, which has made education uniform and rigid. However, the life styles and needs of the Japanese have diversified, which means that the educational institutions must also diversify and move away from uniformity, rigidity and closedness. It has been recognized that educational administration and the education system should be more decentralized and greater autonomy should be given to individual universities to design their own structures for education and research, to develop their own curriculums and content for general and specialized disciplines to suit the needs of their local communities, and to develop their own mechanisms for student admission. For admissions, Japan has a policy to admit larger numbers of foreign students to further pave the way for future international co-operation. The full autonomy of higher education institutions is expected to generate a diversification of specializations and thereby expand the opportunities that are available to students and the community to use the academic services. In addition, co-operation among autonomous institutions is also being encouraged, particularly in the area of continuing education, where the introduction of a 'credit accumulation system' has been suggested. The system will allow the accumulation of credits earned from different institutions, which should encourage student mobility.

Teachers and administrative staff. Teachers play a central role in the educational and research activities of a university. One of the fundamental requirements for a university is to secure staff members who are deeply committed, enthusiastic and have strong abilities in education and research. Yet, the new policy recognizes the diverse duties of university teachers and recommends that every university should seek teacher applicants from a wider range of sources including foreign nationals. A feasibility study was recommended to assess the possibilities of appointing teachers on a contract basis in order to foster flexibility and vitality within the universities and to increase the mobility of young teachers. The study is to give careful consideration to teacher salaries and the research environment. To further activate university education and research activities, the functions and administrative structure of the university will be rationalized and improved. To ensure sound institutional management, master's degree courses will be introduced related to university business administration and management and administrative, and clerical personnel will be given opportunities for systematic and professional in-service training.

Promotion of scientific research. Education and research are the two major responsibilities of higher education institutions. The current educational reform emphasizes that institutions of higher learning should promote basic scientific research, strengthen their co-operation with the society and promote international exchanges for scientific research. However, to promote basic research, universities have to be fully equipped. To carry out this task, the reform measures include a review of research-support facilities, increased government allocations for scientific research, strengthened co-operation with the community, utilization of part-time lecturers and visiting professors, more flexibility for the graduate programmes, measures to facilitate the dissemination of research findings to the public and strengthen scientific information systems and the expansion of joint research programmes among industries, government and universities.

The sharing of scientific research at the international level will be achieved through international exchanges of researchers, exchange programmes between Japanese universities and overseas universities and participation in international scientific research projects. These activities can be successful only when the internal mechanism for the administration of international scientific programmes is strong.

Financing of higher education. In Japan, a greater part of higher education is provided by private educational institutions. As a consequence, the amount of public expenditure for higher education is relatively small. To improve the quality of higher education, it has been proposed that government authorities should strive to increase public spending while reviewing the state of affairs in higher education. The areas that will require public financial support are:

a) The promotion of basic, creative and interdisciplinary research, the development of a joint research structure, the establishment of a scientific information system;

b) Participation in activities related to the internationalization of higher educational institutions such as the acceptance of foreign students, international scientific exchanges and active participation in international research;

c) Improvement of the structures, physical facilities and equipment of graduate schools.

Government participation will encourage higher education administrations to obtain funds from diverse sources to reinforce the schools' autonomous financial status.

China*

As in other countries, the primary function of higher education in China is to produce high-level manpower and research to meet the needs of national development. Recently, China has experienced rapid changes in moving from traditional to modernized agriculture and from self-subsistence to a large-scale production economy. In its current form, higher education can no longer adapt itself to these rapid developments and its reform is considered indispensable. The focus of higher educational reform in China seems to be directed in four major areas: form, discipline, administration system, and linkage between higher education and the society.

Variation in forms of higher education. The trends indicate that higher education should not only produce skilled and specialized manpower for the future society but should also readjust the structure of manpower in the existing society. Children and youths growing up during the time of the 'cultural revolution' lost their chance to receive higher education and many of them lacked the necessary vocational and technical training before they were employed. In 1982, this group numbered 163 million, constituting 31.3 per cent of the working population. It is impossible to upgrade this large a group through the nation's general full-time institutions of higher education. China must develop various alternative forms of higher education for these working adults, to increase their working efficiency for national benefit. At present, higher education institutions are appearing as broadcasting and TV universities, workers' universities, peasants' universities, and independent correspondence colleges.

Revision of disciplines. Various documents in China recognize that the disciplines offered in higher education institutions in China no longer meet the needs of the nation's present socialist modernization programme. For example, liberal arts subjects have normally concentrated on such basic topics as literature, history and philosophy and only slightly touched on applied subjects such as journalism, library science and publishing. On the other hand, the specializations that were available were mostly narrow and the development of new specializations has been slow. In 1982, about 10,000 graduates in industrial automation reportedly could not find suitable jobs because of the very narrow specialized training they had received. The disciplines need to be revised and more practical subjects incorporated, including those subjects that are relevant to the needs of the present society.

---

* Based on 23 papers presented by Chinese scholars at the International Seminar on Current Policies for Higher Education Reform, held in Beijing, China, 21-25 June 1988.

Administration system of higher education. The administration system of higher education is another factor that hinders the adaptability of higher education to meet the needs of Chinese society. In the past, the administration of higher education was highly centralized to the extent that the central government did all of the planning for the institutions ranging from the appointment of teaching staff and the provision of funds and resources in kind to the assignment of jobs for graduates. While such practice does guarantee basic education and employment, it weakens the vitality of institutions to discover the manpower needs of the locality and to initiate research in new disciplines. In the current move to reform the administration system for higher education, an effort will be made to secure an appropriate balance between macro-administration at the central and local levels and the autonomy of individual institutions. The central and local governments will only assign obligatory tasks to institutions of higher education. These tasks are key national projects, which will be implemented according to contracts established between the institutions concerned and the government. Institutions would be free to sign contracts with employing institutions and have autonomy in curriculum adjustment, production of teaching media, and in their research commitments and scientific and technological explorations and services.

In addition, it is felt that the system of guaranteed job assignment for all college graduates needs to be phased out because it reduces students' enthusiasm to study and the enthusiasm of employing units to make rational use of their skilled manpower. The function of higher education institutions is to train a specialized labour force for the society, therefore bridges and links between employers, students and the higher education institutions need to be established. The Assignment Symposium for Graduates of Higher Learning held in Shanghai in October 1987 concluded that some 40 institutions participating in the symposium would adopt the 'triple satisfaction' approach, which allows employers to choose their employees, students to choose their work and higher education institutions to recommend their competent graduates. Furthermore, to enhance the rational use of specialized manpower, the Central Institute of Educational Research proposed to give higher education institutions the power to readjust the job assignments of their graduates within one year upon request from either party in case of a mismatch between demand and supply. This will also provide useful feedback for institutions to learn if they have produced the right type and level of specialization needed by the employing units. If they have not, a curriculum modification will be made.

Promotion of linkages with the society. Higher education cannot fulfill its role and responsibility to contribute to national development if it is detached from the society. In China, emphasis is placed on academic work, research and the enterprise. The publication of the central government's resolution on reform in economic, educational, scientific and technological systems encourages wider and closer inter-relationships between universities, units of science and technology and production enterprises. China's socialist modernization programme requires both basic and scientific and technological knowledge. Such a programme can only be successful in the presence of an efficient linkage between knowledge-generating units and production units.

Various attempts have been made to achieve this objective. To nourish higher education's consciousness and initiatives to directly contact research institutions and production bodies, higher education institutions are being encouraged to render professional services to other sectors in the form of contracted research or technical consulting services. They are permitted to run high technological businesses independently or jointly with enterprises. Through these efforts higher education institutions will incorporate into their curricula the practical issues learned directly from their hands-on experience.

Aside from the linkage at the institutional level further attempts have been made to establish links with the society between individuals. Teachers and experts at higher education institutions and research units are encouraged to interchange and hold 'concurrent posts', which will develop horizontal relations among these bodies and help to rule out redundant research efforts and the repetition of specializations. On the student side, the principle of education combining theory and practice with production as a supporting counterpart is being applied. Undergraduate students will have to attend four to six months of social practice, i.e., social investigation, service and productive practice during their four-year programme. As for graduate students, experiments are also under way to put them into some kinds of social practice before graduation. The Departments of Law in two comprehensive universities, for example, are experimenting with training Masters of Law students at the national High Court. The practice of putting students in the work place helps to foster their ability to solve practical problems, enables them to make more sense out of their study and arouses their motivation. It can also create ideal experimental conditions for post-graduates to do innovative research and produce comprehensive theses.

Taking a global perspective, closer links between academic and productive bodies not only shorten the process of technology transfer from academic innovation to productive application, but also increase the technical competency of production units and vitalize academic teaching and research. Such links also open up the possibility of mobilizing additional educational funding to strengthen higher education departments and faculties and to improve the conditions of institutions and their academic staff.

Concluding remarks

Many countries in Asia and the Pacific have embarked on major reforms in higher education. The nature and comprehensiveness of such reforms undoubtedly vary from one country to the other. Nevertheless, certain common concerns are reflected in many policy documents. The review of higher education policies in India, China and Japan lend support to this conclusion.

In the present world of rapid modernization and high technology, higher education policies in these countries are developed on the premise that institutions of higher learning should be vitalized not only to keep pace with the present, but also to predict well ahead of time what future demands will be placed on them. In all three countries, emphasis is given to the development of linkages between higher education and the society so that higher education may respond better to emerging needs. Japan's policy expands the scope of 'society' to include international co-operation, that is, the admission of foreign students and the appointment of teaching staff from various universities. For efficient co-operation, both India and Japan share a policy to develop electronic information systems for administrative and research work.

The policies state that to attain efficient co-operation, each institution has to be strong by itself. The review of policies in India, Japan and China reflects the trend that higher education reform will head towards more autonomy for educational institutions with broad policy planning at the government level. To promote the efficiency of individual institutions, India and Japan emphasize the strengthening of physical facilities and staff development for research activities and improving the quality of teaching. By the same token, China emphasizes closer ties among researchers, academics and enterprises, which would naturally vitalize all three sectors. Higher education policies in all three countries expect applied courses to be incorporated into the higher education curriculum.

Three central themes seem to run through the higher education policies of India, Japan and China: the strengthening of institutional autonomy and co-operation among universities; the promotion of research activities; and the development of more effective linkages with the society. The policies equally emphasize that any experience of higher education must be matched by high quality.

SECTION FOUR

BIBLIOGRAPHICAL SUPPLEMENT

Bulletin of the Unesco Principal
Regional Office for Asia and the Pacific
Number 29, 1988

BIBLIOGRAPHICAL SUPPLEMENT

Australia. Schools Commission. *The search for educational improvement: constraints and possibilities in the legal structure of government schooling.* Woden, A.C.T., 1982. 75 p. Bibliography: p. 54-57. (Choice and diversity in government schooling: discussion paper no. 3).

Australian National Commission for Unesco. Regional Seminar on Educational Administration, 8-14 April 1982. *Managing structural change in education in Asia and the Pacific: a blueprint for action; papers, findings and recommendations,* ed. by G.S. Harman. Canberra, Australian Government Publishing Service, 1983. 82 p.

Bangladesh. Ministry of Education. *Third five-year plan (1985-1990) education sector document.* Dhaka, 1985. 78 p. (Restricted).

Berenschot-Moret-Bosboom Management Consulting for Development. *Project identification, programming and planning in Maldives.* Tilburg, Netherlands, 1980. 2 v.

Berstecher, Dieter [ed.]. *Education and rural development: issues for planning and research,* ed. by D. Berstecher with contributions from others. Paris, Unesco: International Institute for Educational Planning, 1985. 233 p.

Bhushan, Satya; Prakash, Brahm; Kalpande, V.A.; Aggarwal, Yash; Menon, Pramila. *Micro-level educational planning and management: case studies from India,* ed. by Warren Mellor. Bangkok, Unesco, 1987. 104 p.

Bird, Patrick. *Microcomputers in school administration.* 2d ed. London, Hutchinson, 1986. 250 p., illus. Bibliography: p. 239-243.

Black, H.D.; Dockrell, W.B. *Diagnostic assessment in secondary schools: a teacher's handbook.* Edinburgh, Scottish Council for Research in Education, 1980. 86 p.

Bray, Mark [ed.]. *Education and development in Papua New Guinea: issues for planners.* London, Department of Education in Developing Countries, University of London Institute of Education, 1985. 71 p. (EDC Occasional papers, no. 8).

Bray, Mark. *Educational planning in a decentralized system: the Papua New Guinean experience.* Port Moresby, University of Papua New Guinea Press, 1984. 159 p.

Caldwell, Brian J.; Spinks, Jim M. ***Policy-making and planning for school effectiveness.*** Hobart, Tasmania, Education Department, 1986. xii, 213 p.

China. Central Committee of the Communist Party. ***Reform of the educational structure; decision of the CPC Central Committee.*** Beijing, Foreign Languages Press, 1985. 22 p.

China. State Education Commission. ***The development of education in China, 1984–1986; country report from the People's Republic of China.*** Beijing, 1986. 105 p.

Day, Chris; Moore, Roger, eds. ***Staff development in the secondary school: management perspectives.*** London, Croom Helm, 1986. 312 p. Chapter bibliographies. (Croom Helm educational management series).

Fernando, Neil, ed. ***Management for educational development in Sri Lanka.*** Colombo, Ministry of Education, 1984. v, 160 p.

Freire, Paulo. ***The politics of education: culture, power and liberation;*** introduction by Henry A. Giroux, tr. by Donaldo Macedo. South Hadley, MA, Bergin & Garvey Publishers, 1985. xxv, 209 p.

Gould, William T.S.; Dixey, Rachael A. ***Provincial education planning and community schools: an analysis and extension of the provincial component in the proposed project funded by the second World Bank loan to education in Papua New Guinea.*** Waigani, Department of Education, University of Liverpool, U.K., 1980. 1 v. (various paging) mimeo.

Gronn, Peter. ***Rethinking educational administration: T.B. Greenfield and his critics.*** Geelong, Victoria, Deakin University, 1984. 166 p. (Theory and practice in educational administration).

Guo, Sheng. ***Microcomputer processing and analysis of sample survey in education: a methodological case study.*** Bangkok, Educational Planning, Management and Statistics Unit, Unesco Principal Regional Office for Asia and the Pacific, 1988. 37 p.

Hessong, Robert F.; Weeks, Thomas H. ***Introduction to education.*** New York, Macmillan Publishing Company, 1987. xviii, 522 p. illus.

Hetland, Atle; Ishumi, Abel G.M., eds. ***Educational planning in developing countries: a report of the Nordic Association for the Study of Education in Developing Countries.*** Stockholm, Almqvist & Wiksell International, 1984. 162 p.

Hoyle, Eric. ***The politics of school management.*** London, Hodder and Stoughton, 1986. 188 p. (Studies in teaching and learning).

IIEP Workshop on the Training of Trainers in Educational Planning, Nairobi, 29 June - 10 July 1987. ***The training of trainers in educational planning; report of an IIEP Workshop.*** Paris, International Institute for Educational Planning. Unesco, 1987. 186 p. mimeo.

India. Ministry of Education. ***Challenge of education; a policy perspective.*** New Delhi, 1985. 119p.

India. Ministry of Human Resource Development. Department of Education. ***National policy on education 1986.*** New Delhi, 1986. 29 p.

India. Planning Commission. ***Seventh Five-Year Plan (1985–1990).*** New Delhi, Government of India Press, 1985. 2 v.

India – Orientation Programme in Educational Planning and Administration for Senior School Administrators, 11th, New Delhi, 11–28 February 1985. ***Educational planning and administration for senior school administrators; report.*** New Delhi, National Institute of Educational Planning and Administration, 1985. 1 v. (various paging) mimeo.

Indonesia. Ministry of Education and Culture. Bureau of Planning. ***Management training of educational and cultural planning at district level.*** Jakarta, 1987/1988. 11 v. mimeo. Text in Bahasa Indonesia. (Strengthening the planning and management capabilities of the provinces in the education sector – STEPPES).

International Institute for Educational Planning, Paris. ***A conception framework for the development of lifelong education in the USSR***, by Alexander P. Viladislavley. Paris, 1987. 111 p. (Fundamentals of educational planning, no. 35).

International Institute for Educational Planning, Paris. ***Education in austerity: options for planners,*** by Keith M. Lewin. Paris, IIEP, 1987. 131 p. (Fundamentals of educational planning, no. 36).

International Institute for Educational Planning, Paris. ***Educational planning as a social process,*** by Thierry Malan. Paris, 1987. 97 p. (Fundamentals of educational planning, no. 33).

International Institute for Educational Planning, Paris. ***Higher education and social stratification: an international comparative study,*** by Torsten Husen. Paris, 1987. 70 p. (Fundamentals of educational planning, no. 34).

International Intervisitation Programme in Educational Administration, 6th, Hawaii, 10–14 August; Fiji, 17–21 August; New Zealand, 24–29 August 1986. ***Equity and diversity: challenges for educational administrators; record of proceedings.*** Wellington, New Zealand Educational Administration Society, 1986. 184 p.

International Seminar on Priorities in Educational Development in Pakistan, Projects and Training Programmes, Islamabad, 7-9 September 1983. ***Priorities in educational development in Pakistan; report of an International Seminar,*** ed. by Warren L. Mellor and M. Athar Khan. Edmonton, Centre for International Education and Development, Faculty of Education, Department of Educational Foundations, University of Alberta, 1985. 111 p.

Japan. Ministry of Education, Science and Culture. ***The systematic planning and administration of higher education in Japan after 1986.*** Tokyo, 1986. 74 p.

Japan. National Council on Educational Reform. ***Educational reform; fourth and final report.*** Tokyo, 1987. 97 p.

Japan. National Council on Educational Reform. ***Educational reform; summary of second report.*** Tokyo, 1986. 48 p.

Japan. National Council on Educational Reform. ***National Council on Educational Reform.*** Tokyo, 1986. 12 p.

Japan. Provisional Council on Educational Reform. ***Educational reform*** [in Japan] ***first report.*** Tokyo, 1985. 85 p.

Kelly, John; Moipu, John; Weeks, Sheldon G. ***A West Sepik education strategy.*** Port Moresby, Educational Research Unit, University of Papua New Guinea, 1982. 222 p. (ERU report No. 40).

King, Edmund. ***Technological occupational challenge, social transformation and educational response, prepared for the International Bureau of Education.*** Paris, Unesco, 1986. 366 p. (International Yearbook of Education, XXXVII, 1985).

Korea, R. Presidential Commission for Education Reform. ***Strategies for educational reform.*** Seoul, 1986. 33 p.

Korean Educational Development Institute. ***The elementary-middle school development project; final report.*** Researchers: Hong Woong-sun, Lee Yong-dug [and others]. Seoul, 1983. 145 p. (KEDI occasional paper 83-4).

Kulkarni, P.D. [and others]. ***Design of development of technical education: Bhilwara district (Rajasthan).*** Chandigarh, Technical Teachers' Training Institute, 1985. 60 p. (Educational planning and management series, 2).

Kulkarni, P.D. [and others]. ***Design of development of technical education for diploma in electronics in Uttar Pradesh.*** Chandigarh, Department of Educational Planning and Management, Technical Teachers' Training Institute, 1985. 65 p. (Educational planning and management series, 3).

Kulkarni, P.D.; Vohra, H.B.L. [and others]. ***Educational planning — a complete design: a master plan for designing education for Himachal Pradesh.*** Chandigarh, Technical Teachers' Training Institute/Himachal Pradesh Directorate of Technical Education, 1985. 158 p. (Educational planning and management series — I: design for state level).

Lancaster, David. ***Management and planning issues in the use of microcomputers in schools.*** Bangkok, Unesco, 1985. 57 p. (Occasional paper in education planning, management and statistics, 11).

Maher, Charles A.; Zins, Joseph E., eds. ***Psycho-educational interventions in the schools; methods and procedures for enhancing student competence.*** New York, Pergamon Press, 1987. x, 207 p.

Malaysia. Ministry of Education. Educational Planning and Research Division. ***Education in Malaysia.*** Kuala Lumpur, 1985. 61 p. illus.

Malpica, Carlos; Rassekh, Shapour. ***Educational administration and multi-level plan implementation: experiences from developing countries; contributions to IIEP seminars held in November 1979, November 1980 and to an IIEP workshop held in December 1980.*** Paris, Unesco: IIEP, 1983. 207 p.

Mellor, Warren L., ed. ***An inventory of documents on educational planning and management in Asia and the Pacific.*** Bangkok, Unesco, 1984. 229 p.

Mellor, Warren L., ed. ***A inventory of documents on educational planning and management in Asia and the Pacific, vol. 2.*** Bangkok, Unesco, 1987. 153 p.

Mellor, Warren L.; Hulls, C.A., eds. ***Regional planning in Sri Lanka; papers of the Sri Lanka SIDA fellows in regional educational planning.*** Clayton, Vic., Monash University, 1985. 2 v.

Middleton, Michael; Brennan, Marie; O'Neil, Maria; Woollen, Trevor. ***Making the future: the role of secondary education in Australia; a discussion paper prepared for the Commonwealth Schools Commission.*** Canberra, Commonwealth Schools Commission, 1986. vii, 136 p.

Nepal — National Seminar on Educational Planning and Programme Formulation in Nepal, Fano Thim, Kathmandu, 10-11 April 1985. ***Educational planning and programme formulation in Nepal; report of the seminar.*** Kathmandu, Institute of Education, Tribhuvan University, 1985. ii, 88 p. & appendices. mimeo.

Nepal — National Training Workshop on Project Management & Programme Implementation, 2-6 September 1985. ***Project management and programme implementation; report of National Training Workshop,*** ed. by Bishwa Kesher Maskay and Bhuchandra Prasad Raj Baidya. Kathmandu, Institute of Education, Tribhuvan University, 1985. 176 p. & appendices, mimeo.

Nuna, Sheel Chand. ***Education and development.*** New Delhi, National Institute of Educational Planning and Administration, 1987. 1 v. (various paging).

Ortiz, Eduardo; Basile, Anne. ***Educational administration terminology/Terminologie de l'administration de l'education/Terminologia de la administracion de la educacion.*** Paris, Division of Educational Policy and Planning, Unesco, 1982. 354 p. (Reports, studies . . . S.96)

Pakistan. Ministry of Education. Curriculum Wing. ***An appraisal study on re-orientation and reform of secondary education in Pakistan.*** Islamabad, 1988. 106 p. mimeo.

Papua New Guinea. Department of Education. ***Teaching in Papua New Guinea.*** Port Moresby, 1985. 22 p.

Philippines. Office of the National Economic and Development Authority. ***Medium-term Philippine development plan, 1987-1992.*** Manila, 1986. (Chapter 1. ***Development challenges, goals, strategies and policies,*** p. 3-48; Chapter 6. ***Education and manpower development,*** p. 195-220).

Qureshi, Saeed Ahmad. ***Agenda for educational development, 1988-93.*** Islamabad, Ministry of Education, 1988. 25 p. & annexes.

Raza, Moonis, ed. ***Educational planning: a long-term perspective.*** New Delhi, National Institute of Educational Planning and Administration, 1986. xxix, 488 p.

Rhee, Kyu Ho. ***To the young Korean intellectuals.*** Seoul, Hollym International Corp., 1981. 192 p.

Sapra, C.L.; Dudani, S.S., eds. ***Education of the future: management challenges.*** New Delhi, National Book Organization, 1986. xiii, 182 p.

Sharma, R.C. ***School management.*** Delhi, Savita Prakashan, 1983. xi, 236 p.

Sharma, Suresh R. ***The effects of new trends in educational financing on the plan objectives: equity, quality and efficiency; a case study on Nepal.*** Bhaktapur, Institute of Education, Tribhuvan University, 1985. 76 p. (Occasional papers in educational planning, management and facilities).

Silaporn Nakornthap. ***Educational policy and politics in Thailand: a case study of education reform, 1973-1977.*** Florida, the Author, 1986. 358 p.

Singh, Baljit, ed. ***Economics of Indian education.*** New Delhi, Meenakshi Prakashan, 1983. 242 p.

Smith, James. ***Analyse de projets pilotes de reforme de l'education liee au developpement rural (1970-1985).*** Paris, Unesco, 1984. 95 p.

Starratt, Robert J. ***Excellence in education and quality of leadership,*** paper presented at a dinner seminar arranged by the Southern Tasmania Council of Educational Administration. . .Geelong, Victoria, 10 July 1985. Geelong, Vic., Institute of Educational Administration, 1986. 20 p. mimeo. (IEA occasional paper, no. 11).

Supkich Sotud. ***Organizational climate and diffusion of innovations in primary schools of central region of Thailand.*** Surat, India, The Author, 1985. 454 p. mimeo. (Ph.D. Thesis. Department of Education. South Gujarat University, May 1985).

Tanom Intarakumnerd. ***A study for development of training programme for administrators of teachers colleges; final report,*** presented to the Asian Programme of Educational Innovation for Development [APEID]. Bangkok, Centre for Educational Innovation and Technology, Department of Teacher Education, 1983. 35 p. mimeo.

Thailand. Ministry of Education. Office of the National Primary Education Commission. ***Future direction for the management of primary education in small primary schools.*** Bangkok, 1983. 23 p. mimeo.

Thailand. National Education Commission. ***National education development plan, phase 6, 1987-1991 (B.E. 2530-2534).*** Bangkok, 1986. 248 p. Text in Thai.

Thailand. National Education Commission. Educational Evaluation Division. ***Thailand Sixth Education Project; a summary report on the mid-term evaluation of the planning and management project.*** Bangkok, 1987. 125 p.

Unesco. Division of Educational Policy and Planning. ***Educational cost and financing.*** Paris, 1985. 6 parts. (Training materials in educational planning, administration and facilities).

Unesco. Division of Educational Policy and Planning. ***Educational management at the local level.*** Paris, 1985. 4 parts. (Training materials in educational planning, administration and facilities).

Unesco. Division of Educational Policy and Planning. ***Educational statistics and indicators.*** Paris, 1985. 6 parts. (Training materials in educational planning, administration and facilities).

Unesco. Division of Educational Policy and Planning. ***The process of educational planning.*** Paris, 1985. 5 parts. (Training materials in educational planning, administration and facilities).

Unesco – Inter-country Study Visits: Philippines, Indonesia, Thailand, 5-25 September 1981. ***Exchanging experiences in educational planning and management; a report.*** Bangkok, Unesco, 1981. 114 p. mimeo.

Unesco. Regional Office for Education in Asia and the Pacific. ***Training modules on micro-level educational planning and management.*** Bangkok, 1985. 6 booklets.

Unesco. Regional Office for Education in Asia and the Pacific. ***Training modules on planning and management of Universal Primary Education (UPE) programme.*** Bangkok, 1984. 12 booklets.

Unesco. Principal Regional Office for Asia and the Pacific. ***Unesco in Asia and the Pacific; report of the work and programme of Unesco Regional Office for Education for 1986.*** Bangkok, 1987. 141 p.

Unesco Expert Group Meeting for the Development of Training Manual on Micro-level Educational Planning and Management, Bangkok, 5-11 May 1986. ***Micro-level educational planning and management: a reference and training manual (Version I).*** Bangkok, Unesco, 1986. 1 v. (various paging).

"Unesco in Asia and the Pacific: 40 years on", ***Bulletin of the Unesco Regional Office for Education in Asia and the Pacific (26), 1986.*** Bangkok, Unesco, 1986. 1 v. (various paging).

[Unesco] Regional Development Workshop on Micro-level Educational Planning and Management with Focus on Meeting the Educational Needs in Rural Areas, New Delhi, 14 October – 2 November 1985. ***Micro-level educational planning and management; report.*** Bangkok, Unesco, 1986. 1 v. (various paging) mimeo.

Unesco Regional Meeting on Inter-institutional Co-operation in Educational Planning and Management, Bangkok, 15–21 July 1987. ***Inter-institutional co-operation in educational planning and management; report.*** Bangkok, Unesco, 1987. 66 p. mimeo.

Unesco-sponsored Workshop on Educational Management for Better Co-ordination of Formal and Non-Formal Education, particularly in relation to Adult/Worker Education, Colombo, 9–13 December 1985. ***Final report of the Workshop.*** Colombo, Institute of Workers' Education, University of Colombo, 1985. 51 p. & appendices. mimeo.

Williams, Trevor; Harsel, Yoshimi [and others]. ***Participation in education.*** Hawthorn, Vic., Australian Council for Educational Research, 1987. 215 p. (ACER research monograph, no. 30).

Yin, Robert; Gwaltney, Margaret K. ***Organizations collaborating to improve educational practice.*** Cambridge, MA, Abt Associates Inc., 1981. xxi, 109 p. & appendices.

Yun, Chung-il; Kang, Moo-sub; Chung, Il-hwan; Kim, Jae-woong. ***Korean education 2000.*** Seoul, Korean Educational Development Institute, 1985. 421 p.

ABOUT THE BULLETIN

The Bulletin was established in 1966, then published twice annually from 1967 to 1972. It is now an annual publication. Special issues were published in January and December 1982. Each issue contains a bibliographical supplement. Copies of numbers 21, 22, 24, 25, 27, and 28 of the Bulletin, and the Special Issues are still available. All previous issues are out of print but may be consulted in libraries.

TOPICS OF PREVIOUS ISSUES

Vol. I, No. 1, September 1966
Review of educational progress in the Asian region

Vol. I, No. 2, March 1967
The problem of educational wastage at the first level

Vol. II, No. 1, September 1967
Widening horizons of education in the Asian region

Vol. II, No. 2, March 1968
Educational research in the Asian region

Vol. III, No. 1, September 1968
Organization of educational planning in the Asian region

Vol. III, No. 2, March 1969
General secondary school curriculum in the Asian region

Vol. IV, No. 1, September 1969
Science education in the Asian region

Vol. IV, No. 2, March 1970
Reform and reorganization in education in the Asian region

Vol. V, No. 1, September 1970
Education in rural areas in the Asian region

Vol. V, No. 2, March 1971
Literacy and adult education in the Asian region

Vol. VI, No. 1, September 1971
Exploring new approaches and methods in education in Asia

Vol. VI, No. 2, March 1972
Education in Asia

Vol. VII, No. 1, September 1972
Higher education in the Asian region

No. 14, June 1973
First level of education in the Asian region

No. 15, June 1974
Administration of education in the Asian region

TOPICS OF PREVIOUS ISSUES (cont'd)

No. 16, June 1975
Educational planning in the Asian region

No. 17, June 1976
Educational building and facilities in the Asian region

No. 18, June 1977
Science education in the Asian region

No. 19, June 1978
Open education: experiments and experiences
in Asia and Oceania

No. 20, June 1979
Education in Asia and Oceania

No. 21, June 1980
Technical and vocational education in Asia and Oceania

No. 22, June 1981
Environmental education in Asia and the Pacific

Special issue, January 1982
Adult education in Asia and the Pacific

No. 23, June 1982
Population education in Asia and the Pacific

Special issue, December 1982
Out-of-school science education in Asia and the Pacific

No. 24, April 1983
Higher education in Asia and the Pacific

No. 25, June 1984
Science education in Asia and the Pacific

No. 26, December 1985
Distance education in Asia and the Pacific

No. 27, November 1986
Unesco in Asia and the Pacific: 40 years on
(1 vol. in 2 parts)

No. 28, September 1987
Continuing education in Asia and the Pacific

UNESCO PRINCIPAL REGIONAL OFFICE FOR ASIA AND THE PACIFIC

Recent Publications

(Supplement to List of Publications, 1988-1989)

REGIONAL EDUCATION PROGRAMMES IN ASIA AND THE PACIFIC (REPAP)

Bulletin of the Unesco Principal Regional Office for Asia and the Pacific, No. 29 (December 1988): Educational reforms in Asia and the Pacific. US $12.00

Education in Asia and the Pacific: reviews, reports and notes, No. 25, December 1988. US $5.00

Bibliographical Documents

Accessions List, No. 72 (July-December 1988)
No. 73 (January-June 1989)

Periodicals of Asia and the Pacific, No. 72 (July-December 1988)
No. 73 (January-June 1989)

Environmental Education

Regional Seminar on the Strategy for Inclusion of Environmental Education at University Level, Yogyakarta (Indonesia), 20 June - 4 July 1987. ***Report.*** 1988. 76 p.

Higher Education

Unesco Principal Regional Office for Asia and the Pacific. ***Higher education and national development in four countries: India, Bangladesh, Thailand and the Philippines.*** Bangkok, 1988. 154 p. bibliography.

Never too far: a newsletter for distance education

Vol. 11, October 1988
Vol. 12, April 1989

ASIA-PACIFIC PROGRAMME OF EDUCATION FOR ALL (APPEAL)

APPEAL training materials for literacy personnel (ATLP)

- Vol. 1 Principles of curriculum design for literacy training
- Vol. 2 Principles of resource design for literacy training
- Vol. 3 Manual for senior administrators of literacy training programmes
- Vol. 4 Manual for supervisors — resource development and training procedures

APPEAL training materials for literacy personnel (ATLP) (cont'd)

Vol. 5. Extra money for the family
Vol. 6. Our forests
Vol. 7. Village co-operatives
Vol. 8. Health services
Vol. 9. Specifications for additional exemplar training manual
Vol. 10. Post-literacy activities and continuing education
Vol. 11. Evaluation a literacy programme
Vol. 12. Implementing a literacy training programme

Literacy

Illustrated literacy material: some samples. Bangkok, 1988. 49 p. illus.

ASIA AND THE PACIFIC PROGRAMME OF EDUCATIONAL INNOVATION FOR DEVELOPMENT (APEID)

General

ACEID Newsletter, No. 34, 1988

Planning, development and implementation: Reports of Meetings and Studies:

Regional Consultation Meeting on the Asia and the Pacific Programme of Educational Innovation for Development (APEID), 11th, Bangkok, 2-8 August 1988. ***Final report.*** Bangkok, Unesco, 1988. 75 p. US $3.00

Occasional Papers

No. 15, January 1989. ***New development in primary education.*** Bangkok, Unesco, 1989. 51 p. US $2.00

Primary Education

APEID. ***Multiple class teaching in primary schools: a methodological guide.*** Bangkok, Unesco, 1988. 69 p. US $7.50

EDUCATIONAL FACILITIES DEVELOPMENT SERVICE (EFDS)

Educational Building Digest

No. 20: ***Safety considerations in educational buildings and furniture design*** US $2.00

Other reports

Almeida, Rodolfo. ***Handbook for educational buildings planning.*** Paris, Unesco, 1988. 92 p. (Educational buildings and equipment 9).

Other reports (cont'd)

Vickery, David S. ***A facilities design guide.*** Paris, Unesco, 1988. 96 p. (Educational building and equipment 10).

POPULATION EDUCATION PROGRAMME SERVICE

Population Education in Asia and the Pacific: Newsletter and Forum, No. 29, 1989.

Manuals, resource books and instructional materials

Family life education, package one. Bangkok, Unesco, 1988. 157 p.
Sex education, package two. Bangkok, Unesco, 1988. 224 p.

SOCIAL AND HUMAN SCIENCES IN ASIA AND THE PACIFIC

Newsletter

International Law: news and information from Asia and the Pacific, Vol. 2, No. 1, June 1988.

Reports

Unesco Principal Regional Office for Asia and the Pacific. ***Promoting Technical Co-operation among Developing Countries (TCDC) in South Asia; report of an expert meeting,*** New Delhi, 5-6 December 1988. Bangkok, Unesco, 1989. 44 p. US $3.00

Unesco Regional Advisory Group of the Asia Pacific Information Network in Social Science (APINESS/RHG), 1st Meeting, Bangkok, 12-18 September 1988. ***Report of the first meeting of the Regional Advisory Group.*** Bangkok, Unesco, 1989. 120 p. (Social and Human Science in Asia and the Pacific).

RUSHSAP Series on Occasional Monographs and Papers

No. 22 ***Relevant technology and rural development: the case of biogas in India,*** by O.P. Joshi. Bangkok, Unesco, 1988. 80 p. US $5.00

No. 23 ***Swanirvar: being self reliant; experiment with community level development in Bangladesh.*** Bangkok, Unesco, 1988. 94 p. US $5.00

CULTURE IN ASIA AND THE PACIFIC

Sukhothai Newsletter (Sukhothai International Campaign), 1 June 1988.